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# LEGISLATIVE DOCUMENTS

SUBMITTED TO THE

## Eighteenth General Assembly

OF THE

STATE OF IOWA,

WHICH CONVENED AT DES MOINES, JANUARY 12, 1880.

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JOHN H. GEAR,	-	-	-	-	Governor.
FRANK T. CAMPBELL,	-	-	-	-	Lieutenant-Governor.
LORE ALFORD,	-	-	-	-	Speaker of the House of Representatives.
JOHN A. T. HULL,	-	-	-	-	Secretary of State.
BUREN R. SHERMAN,	-	-	-	-	Auditor of State.
GEO. W. BEMIS,	-	-	-	-	Treasurer of State.
JAS. K. POWERS,	-	-	-	-	Register of State Land Office.
CARL W. VON COELLN,	-	-	-	-	Superintendent of Public Instruction.
JOHN F. McJUNKIN,	-	-	-	-	Attorney-General.

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VOLUME III.

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DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





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- No.**
- 13.** Biennial Report of the Superintendent of Public Instruction.
- 14.** Report of the State University.
- 14a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the State University.
- 15.** Second Biennial Report of the State Normal School.
- 15a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the State Normal School.
- 16.** Eighth Biennial Report of the Board of Trustees of the Iowa State Agricultural College and Farm,
- 16a.** Report of the Joint Committee of the General Assembly to visit the Agricultural College.
- 17.** Seventh Biennial Report of the Board of Trustees of the Iowa Soldiers' Orphans' Home and Home for Indigent Children.
- 17a.** Report of the Joint Committee of the Eighteenth General Assembly to visit the Soldiers' Orphans' Home.
- 18.** Thirteenth Biennial Report of the Iowa Institution for the Education of the Deaf and Dumb.
- 18a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the Institution for the Education of the Deaf and Dumb.
- 19.** Fourteenth Biennial Report of the College for the Blind.
- 19a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the College for the Blind.
- 20.** Second Biennial Report of the Trustees, Superintendent, and Treasurer of the Iowa State Asylum for Feeble-Minded Children.
- 20a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the Asylum for Feeble-Minded Children.
- 24.** Tenth Biennial Report of the Trustees, Superintendent, and Treasurer of the Iowa Hospital for the Insane at Mount Pleasant.
- 24a.** Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the Hospital for the Insane at Mount Pleasant.
- 25.** Fourth Biennial Report of the Trustees, Superintendent, and Treasurer of the Iowa Hospital for the Insane at Independence.
- 25a.** Report of the Joint Committee appointed by the Eighteenth General Assembly to visit the Hospital for the Insane at Independence.

## No.

- 26. Report of the Visiting Committee to visit the Hospitals for the Insane, made to the Governor of the State.
- 27. Twelfth Biennial Report of the Board of Curators of the State Historical Society.
- 28. First Biennial Report of the Central Station of the Iowa Weather Service.
- 29. Report of Committee on Elections in the case of Bull *versus* Henderson for a seat in the Senate from the 27th Senatorial District.
- 8a. Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the State Fish Hatching House.
- Rules of the Eighteenth General Assembly, and a list of Standing Committees and Members.
- Assessed Valuation of Railroad Property, as fixed by the Executive Council, March 3, 1879.

BIENNIAL REPORT  
OF THE  
SUPERINTENDENT  
OF  
PUBLIC INSTRUCTION,  
TO THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



STATE OF IOWA,  
DEPARTMENT OF PUBLIC INSTRUCTION, }  
DES MOINES, January 13, 1880.

*To the General Assembly of the State of Iowa:*

I have the honor to transmit, herewith, the nineteenth regular report of the Superintendent of Public Instruction, for the period commencing September 16, 1877, and ending September 15, 1879; together with the reports of the State University and State Normal School.

Very respectfully,

C. W. VON COELLN,  
*Superintendent of Public Instruction.*





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# GENERAL SUMMARY OF STATISTICS.

## SECRETARIES' REPORTS.

### SCHOOL DISTRICTS.

	1877.	1878.	1879.
District townships.....	1,086	1,119	1,140
Sub-districts .....	7,015	7,266	7,543
Independent districts.....	3,138	3,117	3,139
Whole number of districts.....	4,224	4,236	4,279

### SCHOOLS.

Ungraded .....	9,948	10,218	10,457
Graded.....	476	483	494
Whole number.....	10,424	10,701	10,951
Average duration, months.....	7.27	7.31	7.35

### TEACHERS.

Males employed.....	7,348	7,561	7,573
Females employed.....	12,518	13,023	13,579
Whole number.....	19,866	20,584	21,152
Average monthly compensation, males .....	\$ 34.88	\$ 33.98	\$ 31.71
Average monthly compensation, females .....	\$ 28.69	\$ 27.84	\$ 26.40

### SCHOLARS.

Between the ages of five and twenty-one years, males .....	291,742	294,714	296,061
Between the ages of five and twenty-one years, females .....	276,117	280,760	281,292
Total number.....	567,859	575,474	577,353
Enrolled in public schools.....	421,163	428,362	431,317
Total average attendance.....	251,372	256,913	264,702
Percentage of enrollment on total enumeration ...	74	74.5	74.7
Percentage of attendance upon enrollment .....	60	60	61.3
Percentage of attendance upon enumeration.....	44	44.6	45.8
Average cost of tuition per month, per scholar ....	\$ 1.62	\$ 1.60	\$ 1.49

## SCHOOL-HOUSES.

	1877.	1878.	1879.
Frame .....	9,279	9,596	9,783
Brick .....	671	650	680
Stone .....	257	244	250
Log .....	89	76	72
Whole number.....	10,296	10,566	10,791
Value .....	\$ 9,044,973	\$ 9,161,701	\$ 9,066,145

## APPARATUS.

Value .....	\$ 159,216	\$ 173,841	\$ 170,468
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## DISTRICT LIBRARIES.

Number of volumes.....	17,329	20,587	22,581
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## TREASURERS' REPORTS.

*School-House Fund.*

## RECEIPTS.

On hand at last report.....	\$ 409,950.62	\$ 420,420.89	\$ 375,254.39
From district tax.....	923,554.94	725,844.29	639,238.79
From other sources.....	343,673.96	345,147.95	456,908.14
Total receipts.....	\$ 1,677,179.52	\$ 1,491,413.13	\$ 1,471,401.32

## EXPENDITURES.

For school-houses and sites.....	\$ 830,713.48	\$ 659,627.14	\$ 469,842.85
For libraries and apparatus.....	30,954.71	31,470.24	11,713.06
On bonds and interest.....	379,098.44	410,859.60	483,014.10
Paid for other purposes.....			142,124.87
On hand.....	436,412.89	389,456.15	364,706.35
Total expenditures.....	\$ 1,677,179.50	\$ 1,491,413.13	\$ 1,471,401.32

*Contingent Fund.*

## RECEIPTS.

On hand at last report.....	\$ 388,855.61	\$ 418,478.99	\$ 474,457.06
From district tax.....	935,409.23	950,754.36	927,272.13
From other sources.....	104,543.70	106,516.87	90,507.17
Total receipts.....	\$ 1,428,808.54	\$ 1,475,750.22	\$ 1,492,236.36



EXPENDITURES.

	1877.	1878.	1879.
For rent and repairs of school-houses.	\$ 216,567.94	\$ 206,198.01	\$ 195,148.52
For fuel .....	264,520.53	230,316.17	237,322.35
Paid secretaries and treasurers.....	94,477.20	98,907.00	103,084.87
For records, dictionaries, etc.....	28,552.12	35,693.52	28,010.82
For other purposes .....	398,898.87	419,098.58	401,285.60
On hand .....	425,791.88	485,536.94	537,384.20
Total expenditures.....	\$1,428,808.54	\$1,475,750.22	\$1,492,236.36

Teachers' Fund.

RECEIPTS.

On hand at last report .....	\$1,413,745.15	\$1,515,960.66	\$1,591,029.50
From district tax .....	2,261,095.79	2,327,963.31	2,347,143.18
From semi-annual apportionments..	681,799.93	678,097.82	706,450.51
From other sources.....	98,953.78	100,619.17	115,522.46
Total receipts.....	\$4,455,594.65	\$4,622,640.96	\$4,760,145.65

EXPENDITURES.

Paid teachers .....	\$2,953,645.08	\$3,011,240.66	\$2,927,308.01
Paid for other purposes .....	.....	.....	62,623.70
On hand .....	1,501,949.57	1,611,400.30	1,770,213.94
Total expenditures.....	\$4,455,594.65	\$4,622,640.96	\$4,760,145.65

PERMANENT SCHOOL FUND.

Amount November 1st .....	\$3,460,348.76	.....	\$3,484,411.18
Interest on the same .....	276,827.90	284,013.00	276,218.00

## COUNTY SUPERVISION.

## EXAMINATION OF TEACHERS.

	1877.	1878.	1879.
Professional certificates issued.....	235	208	207
First grade certificates issued.....	5,194	5,812	6,541
Second grade certificates issued.....	8,427	8,329	9,263
Third grade certificates issued.....	3,380	3,486	2,911
Total number issued.....	17,236	17,835	18,922
Applicants rejected.....	5,061	4,522	2,760
Total number examined.....	22,297	22,357	21,682
Certificates revoked .....	7	9	15
Average age of applicants.....	22.84	22.72	22.93
No experience in teaching.....	3,014	2,602	3,029
Taught less than one year.....	3,590	2,956	2,961
Teachers with State certificates.....	42	35	38

## VISITATION OF SCHOOLS.

Schools visited .....	9,515	9,029	10,620
Visits made during the year.....	12,833	12,459	15,374
Educational meetings held.....	393	368	529

## APPEALS.

Number of cases .....	123	105	101
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## COMPENSATION.

Total paid superintendents .....	\$72,574	\$76,136	\$78,129
Received per annum.....	733	769	789

## PRIVATE SCHOOLS.

Number.....	127	136	154
Teachers employed... ..	471	435	493
Scholars in attendance.....	12,383	12,265	13,698

TEACHERS' NORMAL INSTITUTES.

GENERAL REPORT.

	1877.	1878.	1879.
Number of institutes held.....	99	99	99
Continuing weeks.....	3.33	3.19	3.08
Males in attendance.....	3,534	3,008	3,240
Females in attendance .....	8,395	8,285	8,711
Total.....	11,929	11,293	11,951

FINANCIAL REPORT.

RECEIPTS.

On hand at last report.....	\$ 7,130.45	\$ *8,103.20	\$ 9,419.02
Examination fees .....	16,754.00	17,502.00	20,295.00
Registration fees .....	11,929.00	11,293.00	†11,746.00
State appropriation.....	4,950.00	4,950.00	4,950.00
County appropriation.....	835.00	181.62	197.00
From other sources .....	307.19	1,024.21	206.89
Total receipts .....	\$ 41,405.64	\$ 43,054.03	\$ 46,813.91

EXPENDITURES.

For instruction and lectures.....	\$ 30,123.86	\$ 29,183.60	\$ 30,109.51
For incidentals.....	3,011.08	4,451.41	5,274.55
On hand .....	8,270.70	9,419.02	11,429.85
Total.....	\$ 41,405.64	\$ 43,054.03	\$ 46,813.91

\*A deficiency, by H. A. Huff, former superintendent of Warren county, of \$167.50.

†The balance, \$206, was remitted in Benton county to those who had formerly contributed.

**TABULAR EXHIBIT: SHOWING THE GROWTH OF THE PUBLIC**

\* No report.

† Including log.

‡ Including independent districts.

**SCHOOL SYSTEM OF IOWA FROM 1847 TO 1879, INCLUSIVE.**

## STATEMENT OF LOSSES

*To the school funds of the State by deficits in reports of district officers for the seven years, commencing 1873.*

1873.

ON HAND.	TEACHERS' FUND.	SCHOOL-HOUSE.	CONTINGENT.
Close of 1872, - -	\$ 691,747.37	\$ 333,234.76	\$ 241,644.47
Beginning of 1873, -	664,591.91	282,860.27	238,592.48
Deficit, - - -	27,155.46	50,374.49	3,051.99

1874.

Close of 1873, - -	916,816.93	361,327.51	288,757.75
Beginning of 1874, -	882,553.31	345,564.34	273,995.78
Deficit, - - -	34,263.62	15,763.17	14,761.97

1875.

Close of 1874, - - -	1,198,005.77	874,465.68	327,952.75
Beginning of 1875, -	1,133,314.03	846,366.22	322,191.97
Deficit, - - -	64,691.74	28,099.46	5,760.78

1876.

Close of 1875, - - -	1,419,597.01	439,044.22	373,960.14
Beginning of 1876, -	1,318,157.11	414,041.28	358,143.76
Deficit, - - -	101,439.90	25,002.94	15,816.38

1877.

Close of 1876, - - -	1,442,295.32	435,661.33	384,975.20
Beginning of 1877, -	1,413,745.15	409,950.62	388,855.61
Deficit, - - -	28,550.17	25,710.71	Excess. 3,880.41

1878.

Close of 1877, - - -	1,501,949.57	436,412.89	425,791.88
Beginning of 1878, -	1,515,960.66	420,420.89	418,478.99
		Deficit.	Deficit.
Excess, - - -	14,011.09	15,992.00	7,312.89

1879.

Close of 1878, - - -	1,611,410.30	389,456.15	485,536.94
Beginning of 1879, -	1,591,029.50	375,254.39	474,457.06
Deficit, - - -	20,380.80	14,201.76	11,079.88

Total Deficits, - - \$262,470.50 \$175,144.53 \$53,903.48

Sum total, \$491,518.51, averaging \$70,216.93 per year.



NINETEENTH REGULAR REPORT  
OF THE  
Superintendent of Public Instruction.  
1878-9.

---

IN spite of the hard times and the need of economy, our people have shown a very laudable desire to sustain their schools, and have made heavy sacrifices to pay the large amounts required. There have been reductions in salaries, and in some instances injurious ones, but on the whole we have reason to feel thankful that the crisis of depression has so easily passed. We may hope that, with increased prosperity, the partial reduction may be regained, and that only good and efficient teachers will be employed, at living salaries.

EDUCATIONAL INSTITUTIONS OF THE STATE.

The State University, under the able management of its new president, Hon. J. L. Pickard, has made substantial progress. The abolition of the preparatory classes does not seem to injure the attendance in the college classes, as had been feared. The full effect of this change cannot be determined until another year or two have passed.

The Normal School, under the efficient care of Prof. J. C. Gilchrist, is becoming more and more popular, and the report shows that persons from nearly all parts of the State are availing themselves of the opportunity afforded to secure a professional training to fit themselves for the teacher's calling. Whenever the resources of the State will permit it, we ought to have additional schools for the proper training of teachers. So long as we cannot increase the number, the Legislature should do all it can to foster and build up the one school which we now support for this purpose.

## NORMAL INSTITUTES.

The Normal Institutes have continued to be a very successful and acceptable means of training the large majority of our country teachers. The attendance at the institutes for the last three years has been about equal to the whole number of teachers required for our country schools. To make these institutes more practical and beneficial, a course of study has been furnished to guide both instructors and teachers. It has been the practice, since my connection with the office, to obtain from educators outlines of the branches in which they are especially proficient, and after a revision by a committee, of which the Superintendent of Public Instruction is chairman, enough copies are printed, and ordered by the counties, or by most of them, to put a copy into the hands of each attendant at the institute.

The following educators have prepared the outlines for the years 1878 and 1879:

READING .....	{ J. R. Bowman, Davenport. Miss Lucy Curtis, State Center.
DIDACTICS.....	{ J. H. Thompson, Des Moines. J. C. Gilchrist, Cedar Falls.
GRAMMAR.....	{ J. Breckenridge, Decorah. R. G. Gilson, Corning.
ARITHMETIC .....	{ N. R. Leonard, Iowa City. W. E. Parker, Independence.
GEOGRAPHY .....	{ C. G. Kretschmer, Dubuque. T. H. McBride, Iowa City.
PHYSIOLOGY.....	{ S. Rogers, Sioux City.
HISTORY .....	{ M. F. Arey, Fort Dodge.
PENMANSHIP .....	{ W. H. Pratt, Davenport.
ORTHOGRAPHY .....	{ R. A. Harkness, Garden Grove.

The committee of revision in 1878 consisted of W. J. Shoup, Dubuque, and C. H. Clemmer, Davenport. The committee of revision in 1879 consisted of L. A. Rose, Davenport, and R. M. Ewart, Manchester, with the Superintendent of Public Instruction in each case.

In order to give a fair idea of our work, the course of study for 1879 is here inserted in full.

## TO COUNTY SUPERINTENDENTS AND INSTITUTE INSTRUCTORS.

The course of study herewith presented was prepared by a committee consisting of the Superintendent of Public Instruction, Supt. R. M.

Ewart, of Delaware county, as representative of the county superintendents' convention, and Prin. Leonard A. Rose, of Davenport, of the association of principals and city superintendents.

The outlines furnished to the committee by prominent instructors largely retained the features of the course for last year.

In arithmetic, the course of study will be about the same as for 1877, condensing the third and fourth courses into one and omitting a few items not deemed essential. Instructors desiring to take up the metric system are referred to the course for 1878.

The course in didactics was prepared by Prof. Gilchrist, of the State Normal School, and has been adopted as a whole by the committee, with the omission of a few details, to show the Professor's work in his own way. We suggest to instructors not to dwell upon the part involving a knowledge of mental philosophy, except with advanced teachers.

In history, we have chosen the civil war and the period of reconstruction, with special reference to the points named in the outline.

We give a short outline in physiology, hoping that it will be supplemented by a few practical lectures on the subject of hygiene.

It may be desirable to employ an instructor for conducting a primary school or kindergarten, composed of small children of the town.

We desire to call special attention to the need of training our elementary teachers how to read, and of suggesting what to read. A few lectures on American and English literature, with specimens of some of the best authors, may create a desire for a proper course of reading, in place of the abominable trash now usually perused by too many of our scholars and teachers.

Many institutes waste the time of the teachers by too frequent night entertainments. Lectures and sociables every evening will allow no time for study, and dissipate the mind. Two entertainments a week are profitable, but more are ordinarily injurious.

The form of enrollment slip and programme will be found in the report of the Superintendent of Public Instruction for 1877-78.

We once more earnestly request county superintendents and institute conductors to concentrate the efforts of the teachers upon a few studies, instead of scattering over all the branches in which they are to be examined. The institute is not a cramming machine for examination; but the means to teach methods, incidentally teaching the subject-matter.

The State Normal Institute, if needed arrangements are completed, will be called to meet at Clear Lake, during the week commencing June 30. Professor Robert Graham, of Oshkosh, Wisconsin, is expected to act as conductor. Programmes with full announcements will be sent as soon as arrangements are completed.

Committee, { C. W. VON COELLN,  
R. M. EWART,  
L. A. ROSE.

## READING.

### I. TEACHING BEGINNERS TO READ.

- A. Present the object or picture of object.
- B. Let teacher enter into familiar conversation with the children about the object.
- C. Lead them to distinguish the *picture* of the object from the *real* object.
- D. Teach the *word* which represents the object.
- E. Pupil find the word on the chart or in a list of words on the board.
- F. Spell the word by sound and by letter.
- G. Form sentences containing the word.
- H. Reproduce the word on slate.
- I. Place the article *a* or *an* before the word and read as one word.
- J. Place the article *the* before the word and read in same manner.
- K. Place descriptive adjective between the article and name of object.
- L. Count the words. Reproduce on slate, paying proper attention to spacing.
- M. Practice daily calling words rapidly at sight, using the pupil's entire vocabulary.

### II. FIRST READER.

#### *Objects.*

- A. To secure pure tones and natural delivery:
  - 1, see that pupil opens mouth properly; 2, practice breathing exercises.
- B. To secure fluency and accuracy of speech:
  - 1, let the pupils pronounce by rotation, or as a whole class, with all such changes as the instructor may wish to indicate; 2, let certain words be pronounced and others read silently, thus making such changes as will fasten each word in the pupils' minds, and keep the attention of the whole class constantly; 3, place difficult words of the lesson on the board, and let pupils practice same as in 1 and 2; 4, let pupil read to a punctuation mark, read a sentence, or a paragraph, as indicated by the teacher; 5, spell words by letter and by sound.
- C. To cultivate perception and language:
  - 1, class work; *a*, let the pupil name the objects in the picture with book closed; *b*, pupil give oral abstract of lesson;

**NOTE.**—Question on position and appearance of objects.

- 2, seat work: *a*, copy the words in list at head of lesson; *b*, copy number of lesson and title; *c*, copy one or more paragraphs designated by teacher; *d*, copy sentences placed on board by teacher and put words in place of the dashes.
- D. Position:
  - 1, the posture, whether sitting or standing, should be erect; 2, if sitting, rest the entire soles of the feet on the floor; 3, if standing, place the heel of one foot nearly opposite the instep

of the other foot, a little removed from it, forming with the other nearly a right angle;

**NOTE.**—Change weight of body from one foot to the other as often as necessary to prevent weariness.

4, the head should be erect and the shoulders thrown back;

**NOTE.**—Rest the elbow always on the hip.

5, require a uniform position, right, left, or front; 6, pay attention to the amount and direction of light.

### III. SECOND READER.

#### A. Class Work:

1, continue methods used in First Reader; 2, written and phonic spelling; 3, diacritical marks; 4, give exercises to correct indistinct enunciation; 5, the meaning of words given by their use in short sentences; 6, give attention to the thoughts expressed; 7, exercises in emphasis; 8, exercises in inflection; 9, exercises in pitch; 10, exercises in force.

#### B. Seat Work:

1, same as in First Reader; 2, write the names of all the things you can see in the picture; 3, write answers to questions prepared by teacher, and let the answers be in complete sentences; 4, copy lists of words and divide into syllables; 5, copy lists of words and mark the vowels and silent letters; 6, write three sentences about some object mentioned in lesson; 7, copy one or more stanzas from a poem; 8, commit one or more stanzas to memory; 9, write words opposite in meaning to those given by teacher.

### IV. THIRD READER.

#### A. Class Work:

1, continue methods used in the Second Reader; 2, spell by letter and by sound;

**NOTE.**—Written spelling should receive more attention than oral spelling in this grade.

3, question minutely as to the meaning of parts of sentences; 4, pupils read the definition instead of the original word; 5, substitute nouns for pronouns; 6, oral abstract of lesson; 7, pupils find and read points suggested by the teacher; 8, one pupil name points for others to read; 9, practice upon difficult combinations in words and sentences; 10, concert reading.

#### B. Seat Work:

1, same as in Second Reader; 2, write sentences containing common abbreviations, as Mr., Mrs., Dr., etc.; 3, write entire words in place of such contractions as there's, can't, won't, I'm, etc.; 4, write an abstract of the lesson; 5, write a short story about what you see in the picture; 6, write a letter to a friend; 7, copy lists of words, syllabicate and mark accent; 8, give time enough to allow the pupil to make his exercise a practice in penmanship.

### V. ADVANCED READING.

#### A. Classify and thoroughly review the elementary sounds.

#### B. Voice culture:

1, breathing exercises; 2, qualities of voice, take exercises for practice; 3, accent; 4, emphasis; 5, inflection; 6, force; 7, pitch; 8, rate; 9, pauses.

#### C. Preparation of lesson:

1, correct pronunciation.

**NOTE.**—The pupil should be able to represent the sounds in every word in the lesson.

- 2, thoroughly understand the subject-matter; 3, state the substance in pupil's own language; 4, short biographical sketch of author; 5, explain all geographical or historical points, etc., included in the lesson; 6, account for marks of punctuation; 7, account for the use of capital letters; 8, character of selection; 9, qualities of voice used in reading selection; 10, pitch, rate, and force; 11, criticisms upon reading by pupils; 12, criticisms by teacher; 13, criticisms upon the author by class; 14, gestures.

## ARITHMETIC.

### COURSE NO. 1.

#### *Simple Numbers, Integral and Fractional.*

#### I. FUNDAMENTAL RULES, WITH PRIMARY INSTRUCTION.

- A. Notation and numeration:
  - 1, definitions: *a*, Arabic; *b*, Roman; 2, practice in the same for primary instruction.
- B. Addition and subtraction:
  - 1, definitions: *a*, sum; *b*, difference; *c*, minuend; *d*, subtrahend; 2, practice for primary instruction; 3, practice for advanced pupils; 4, methods of proof.
- C. Multiplication and division:
  - 1, definitions: *a*, usual definition of terms; *b*, define division as the reverse of multiplication; *c*, define multiplication as contracted addition; *d*, define division as contracted subtraction; *e*, dividend = divisor  $\times$  quotient + remainder; 2, three principles of division; 3, use of tables; 4, practice for primary instruction; 5, practice for advanced pupils; 6, mental exercises.

#### II. FACTORING, DIVISORS AND MULTIPLES.

- A. Factoring:
  - 1, definitions: *a*, factor; *b*, prime number; *c*, composite number; *d*, odd and even numbers; 2, principles; 3, rules: give rules for finding 2, 3, 4, 5, 8 and 9, as factors by inspection; 4, practice; 5, cancellation.
- B. Divisors, factors, measures, aliquot parts.
  - 1, common divisor: *a*, definition; *b*, principles; *c*, manner of finding; 2, greatest common divisor: *a*, definition; *b*, principles; *c*, rules for finding; *d*, practice.
- C. Multiples or dividends:
  - 1, common multiples: *a*, definition; *b*, how many; *c*, manner of finding; 2, least common multiple: *a*, definition; *b*, rules for finding; *c*, practice.

#### III. COMMON FRACTIONS.

- A. Definitions:
  - 1, usual: *a*, numerator; *b*, denominator; *c*, fraction; 2, second mode of division; *a*, numerator — dividend; *b*, denominator — divisor; *c*, fraction — quotient.
- B. Principles. The same as in division.

- C. Classification:
  - 1, with regard to denominator:  $a$ , common;  $b$ , decimal; 2, with regard to value;  $a$ , proper;  $b$ , improper; 3, with regard to composition:  $a$ , simple;  $b$ , mixed number;  $c$ , compound;  $d$ , complex.
- D. Reduction following the third principle:
  - 1, to lowest terms; 2, from mixed number to improper fraction; 3, from improper fraction to mixed number; 4, to equivalent fractions with different denominators; 5, to equivalent fractions with the same denominator; 6, to equivalent fractions with the least common denominator.
- E. Addition and subtraction: 1, rule; 2, practice.
- F. Multiplication, including reduction of compound fractions to simple ones:
  - 1, analytical explanation; 2, rule; 3, practice.
- G. Division, including reduction of complex fractions to simple ones:
  - 1, explanation to children by reducing both fractions to a common denominator and dividing the numerators; 2, analytical explanation; 3, definition of reciprocal; 4, rule, multiply by reciprocal of divisor; 5, practice; 6, reduction of complex fraction to simple one:  $a$ , definition;  $b$ , rule, multiply both terms by the L. C. M. of the denominators.

#### IV. DECIMAL FRACTIONS.

- A. Definition.
- B. Reason for making a separate class.
- C. Notation and numeration:
  - 1, rules; 2, practice.
- D. Addition and subtraction:
  - 1, rules; 2, practice.
- E. Multiplication:
  - 1, rules; 2, reason for pointing; 3, practice.
- F. Division:
  - 1, rules; 2, reason for pointing; 3, practice.
- G. Reduction:
  - 1, to fractions having same denominator; 2, common to decimal; 3, decimal to common; 4, one number to a decimal of another.

#### COURSE NO. 2.

#### *Compound or Denominate Numbers.*

##### I. FEDERAL MONEY.

- A. Definition.
- B. Reading and writing.
- C. Addition and subtraction.
- D. Multiplication and division.
- E. Applications:
  - 1, price and number of simples given, find cost; 2, cost and price of simples given, find the number of simples; 3, cost and number of simples given, find price of simple; 4, price, an aliquot part of a dollar, and number of simples given, find cost; 5, price per hundred or thousand, and number of simples given, find cost; 6, price per ton, and number of simples given, find cost; 7, bills and accounts.
- F. Practice.

##### II. ENGLISH MONEY.

Give table, with practice.

## III. WEIGHTS.

- A. Troy.
- B. Apothecaries'.
- C. Avoirdupois.  
Give table for each, with practice.
- D. Comparative weight:  
1, standard; 2, troy and apothecaries' compared; 3, troy and apothecaries' compared with avoirdupois: *a*, basis of comparison; *b*, manner of comparing; *c*, practice.

## IV. MEASURES OF EXTENSION.

- A. Linear.
- B. Cloth.
- C. Square.
- D. Cubic.  
Give table for each, with practice.
- E. Rectangular surfaces:  
1, floors; 2, plasterers' and pavers' work.
- F. Practical measurements of rectangular solids:  
1, solids; 2, stone and brick masonry.
- G. Surveyors' long measure:  
1, table; 2, use; 3, comparison with linear measure.
- H. Surveyors' square measure:  
1, table; 2, use; 3, comparison with common square measure; 4, mode of finding area of fields; 5, mode of finding one dimension, the area and the other dimension given; 6, government surveys (outline).

## V. MEASURES OF CAPACITY.

- A. Dry measure.
- B. Liquid or wine measure.  
Give table for each, with practice.
- C. Comparative measure:  
1, contents of bushel; 2, contents of gallon; 3, contents of bins and other receptacles.

## VI. CIRCULAR MEASURE.

- A. Table and use.
- B. Practice.

## VII. MEASURE OF TIME.

- A. Table and use.
- B. Practice.
- C. Solar year.
- D. History of calendar.

## VIII. MISCELLANEOUS TABLE.

## IX. REDUCTION.

- A. Ascending.
- B. Descending.  
Give rules, with practice.

## X. ADDITION AND SUBTRACTION OF DENOMINATE NUMBERS.

## XI. MULTIPLICATION.

- A. By small numbers.
- B. By factors of composite numbers.
- C. By large numbers.



## XII. DIVISION.

- A. When both divisor and dividend are denominate.
- B. To find one of the equal parts of a denominate number.

## XIII. LONGITUDE AND TIME.

- A. Table and use.
- B. Practice covering all cases.

## XIV. REDUCTION OF FRACTIONAL DENOMINATE NUMBERS.

- A. Reduce to a lower denomination.
- B. Reduce to a higher denomination.
- C. Reduce to integers.
- D. Reduce one number to the fraction of another.

## XV. REVIEW WITH PRACTICE.

## ADVANCED COURSE.

*Percentage and Applications, Proportion, Involution, Evolution, and Mensuration.*

## I. DEFINITIONS AND CASES.

- A. Definitions.
  - 1, percentage; 2, base; 3, rate; 4, amount or difference; 5, sign of per cent.
- B. Cases:
  - 1, base and rate given, find percentage; 2, base and percentage given, find rate; 3, percentage and rate given, find base; 4, amount or difference and rate given, find base.
- C. Applications without reference to time:
  - 1, profit and loss: *a*, terms: (*a*), cost; (*b*), selling price; (*c*), gain or loss; (*d*), rate of gain or loss; *b*, definitions to bring them under the four cases of percentage; *c*, rules; *d*, practice; 2, commission and brokerage; *a*, terms and definitions; *b*, cases of percentage; *c*, rules; *d*, practice; 3, stocks: *a*, terms and definitions; *b*, cases; *c*, rules; *d*, practice; 4, gold investments and government bonds: *a*, terms and definitions; *b*, cases; *c*, rules; *d*, practice; 5, insurance: *a*, terms and definitions; *b*, cases; *c*, rules; *d*, practice; 6, taxes: *a*, terms and definitions; *b*, principles; *c*, practice; 7, duties: *a*, terms and definitions; *b*, deductions; *c*, principles; *d*, practice.
- D.\* Applications with reference to time.
  - 1, interest; *a*, terms and definitions; *b*, rules for finding interest for one year; *c*, rule for finding interest for any length of time; *d*, different methods; (*a*), by aliquot parts; (*b*), six per cent. method; (*c*), banking method, product of dollars and days divided by sixty for six per cent.; *e*, practice; *f*, interest equals the product of principal, rate and time; 2, problems in interest; give rule and formula for each: *a*, find the principal; interest, rate and time given; *b*, find the rate; interest, principal and time given; *c*, find the time; interest, principal and rate given; *d*, find the principal; amount, rate and time given; *e*, practice; 3, compound and annual interest: *a*, terms and definitions; *b*, rule; *c*, practice; 4, true discount: *a*, terms and definitions; *b*, same as *d* under problems of interest; *c*, practice; 5, partial payments: *a*, United States court rule; (*a*), principles; (*b*), rule; (*c*), practice; *b*, New Hamp-

\* In some of the former applications, a reference to time is made in the more complicated calculations, especially stocks and life insurance.

shire, or merchants' rule; (*a*), principles; (*b*), rule; (*c*), practice; 6, bank discount: *a*, terms and definitions; *b*, days of grace explained; *c*, cases; *d*, rules; *e*, practice; 7, exchange: *a*, inland or domestic; (*a*), terms and definitions; (*b*), rules; (*c*), practice; *b*, foreign; (*a*), terms and definitions; (*b*), rules; (*c*), practice; *c*, arbitration; (*a*), terms and definitions; (*b*), rules; (*c*), practice; 8, equation of payments: *a*, accounts on one side only; *b*, accounts on both sides; *c*, under each; (*a*), principles; (*b*), rules; (*c*), practice.

**E. Ratio:**

1, definition: *a*, usual; *b*, third method of division; 2, principles same as in division; 3, practice.

**F. Proportion:**

1, simple; *a*, definition of terms; *b*, law of correct proportion; *c*, use of proportion; *d*, rules; *e*, practice; 2, compound: *a*, definitions; *b*, rules; *c*, define cause and effect; *d*, give rule for stating by cause and effect; *e*, practice under both rules.

**G. Partnership:**

1, without reference to time: *a*, definitions; *b*, rule; *c*, practice; 2, with reference to time: *a*, definitions; *b*, rule; *c*, practice.

**H. Involution:**

1, definitions; 2, rule; 3, practice.

**I. Evolution:**

1, definitions; 2, square root; *a*, definition; *b*, explanation; *c*, rule; *d*, practice; *e*, application; 3, cube root: *a*, definition; *b*, explanation; *c*, rule; *d*, practice; *e*, applications.

**J. Mensuration:**

1, definitions: *a*, lines; *b*, angles; *c*, figures; *d*, solids; 2, rules for: *a*, triangles; *b*, quadrilaterals; *c*, circles; *d*, similar figures; *e*, prisms with sub-divisions; *f*, cylinders; *g*, pyramids and cones; *h*, frustums; *i*, similar solids.

**K. Metric system if desired.**

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## GEOGRAPHY.

**I. LECTURE** by the Instructor. Subject, Geography, its importance, recent progress in geographical knowledge, relation to other branches of knowledge, to commerce, and recent political changes affecting the geography of the world.

**II. MATHEMATICAL GEOGRAPHY; concerning Earth's—**

**A. Form:**

1, proof of rotundity; 2, size, dimensions.

**B. Motions:**

1, diurnal; *a*, direction; *b*, velocity; *c*, results; 2, annual: *a*, direction; *b*, velocity; *c*, results.

**C. Circles:**

1, great; 2, small; *a*, tropics, how established; *b*, polar circles, how determined; 3, use of these various circles in determining position of points on earth's surface.

**NOTE 1.** Position on a surface may be determined by reference to two rectangular axes.

**2.** Illustrate all by constant use of globe and blackboard.

**III. PHYSICAL GEOGRAPHY—CONFORMATIONS OF:**

**A. Land:**

1, continents; compared in shape, coast-line; varieties of coast-land; 2, islands, their origin, illustrate; 3, surface of land; plains, mountains, plateaus, hills, volcanoes.

**B. Water:**

- 1, sea; oceans, their currents, coast-waters; 2, inland waters; lakes, their origin and character.

**NOTE.**—All to be illustrated thoroughly by examples.

**IV. THE EARTH.****A. Climate and productions as affected by:**

- 1, latitude; 2, altitude; 3, prevailing winds; 4, distance from great bodies of water.

**B. Sources whence the world receives its supplies of minerals and metals.****V. MAN UPON THE EARTH.****A. Races:**

- 1, their relative numbers; 2, their distribution; 3, some physical and mental characteristics.

**B. Governments:**

- 1, different forms described and illustrated; 2, modern tendencies in government discussed.

**C. Religions—sketch the history, character, and present condition of each.****VI. THE UNITED STATES.****A. Description:**

- 1, position; 2, outline; 3, size—compared with other countries.

**B. Surface:**

- 1, mountain ranges, those of the East compared with those of the West; 2, plateaus, plains; 3, river systems.

**C. Climate—as affected—**

- 1, by distribution of prairie and forest; 2, by mountains and plains; 3, by the great lakes.

**D. People:**

- 1, distribution as to density of population, great cities in order; 2, employments and sources of wealth in different sections; 3, state of education.

**E. Commercial routes:**

- 1, principal railroads; 2, principal canals.

**F. Government. Outline of the system.****VII. IOWA.****A. Position and extent.****B. Character of surface and drainage.****C. Sources of wealth; occupations.****D. Population; principal cities; state of education.****E. Principal commercial routes.****F. United States surveys as illustrated in this State.**

**NOTE.**—Other states and countries to be studied as the last two, VI and VII.

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**HISTORY.**
*Civil War and Period of Reconstruction.***I. CIVIL WAR.****A. Causes.****B. Parties to the contest, their status and condition.****C. Expectation of each with regard to the probable termination, and the objects to be attained.**

- D. Relation of each party to foreign powers.
- E. Recognition by the United States of the existence of war, and its effects upon commerce and the exchange of prisoners.
- F. Plans of the campaigns for each year.
- G. Effects upon the colored race in the South.
- H. Slavery and free labor contrasted as means of protection to homes.
- I. Means, resources, and advantages of each party.
- J. Causes of the defeat of the Confederacy.

## II. RECONSTRUCTION PERIOD.

- A. Condition of the South after the war.
- B. Different opinions on the relation of the seceded states to the Union.
- C. Constitutional amendments, their effect upon the colored race in the seceded states and in the border states.
- D. Treatment of Confederate leaders; amnesty.
- E. Re-admission of the states.
- F. Temporary military control.
- G. Release from military control.
- H. Change of political parties arising from reconstruction.

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## GRAMMAR.

### *First Division.*

## I. LANGUAGE LESSONS.

- A. The Sentence:
  - 1, develop a sentence: *a*, by associating words between which a connection exists; *b*, by associating words between which no connection exists, and contrasting results; 2, define a sentence; 3, make sentences; 4, develop a subject, and a predicate; 5, define a subject, and a predicate; 6, analysis, the students making and analyzing sentences.
- B. Nouns and Pronouns:
  - 1, develop the name-word or noun; 2, define the noun; 3, develop the pronoun; 4, define the pronoun; 5, illustrate by practice.
- C. The Verb:
  - 1, develop the verb: *a*, as an action-word; *b*, as a word denoting state of being; 2, composition—verb.
- D. Modifiers:
  - 1, develop idea by written exercises; 2, define a modifier.
- E. The Adjective:
  - 1, develop and define the adjective; 2, analysis of sentences containing adjective modifiers; 3, composition—the adjective modifier.
- F. The Adverb:
  - 1, develop and define the adverb; 2, analysis of sentences containing adverbs; 3, composition—the adverb modifier.
- G. The Preposition:
  - 1, develop by thorough drill, using the usual list of prepositions for the purpose; 2, define a preposition; 3, analysis of sentences; 4, composition—the preposition as a relation-word; 5, define a phrase: *a*, prepositional; *b*, infinitive.
- H. The Conjunction:
  - 1, define a conjunction; 2, analysis of sentences; 3, composition—the conjunction as a connecting-word.

## I. The Interjection:

- 1, independent expressions: *a*, interjections; *b*, nouns; *c*, adverbs; *d*, phrases; 2, composition—-independent expressions.

## J. Complements:

- 1, the object: *a*, develop; *b*, define; *c*, composition—the object; 2, the attribute: *a*, develop; *b*, define; *c*, composition—the attribute; 3, double complements, or objects: *a*, develop by thorough practice; *b*, analysis of sentences containing complements.

**NOTE.**—Review the above, giving careful attention to punctuation and capital letters.

## K. The Complex Sentence:

- 1, develop and define a connective; 2, composition—the connective; 3, exercises in expanding adjectives and adverbs into phrases and clauses; 4, exercises in the abridgment of clauses into phrases and words; 5, analysis of complex sentences; 6, composition—the complex sentence.

## L. The Compound Sentence:

- 1, define; 2, analysis of compound sentences; 3, composition—the compound sentence.

**NOTE.**—Care should be taken that each lesson, before it is left, should be clinched by full exercises in composition.

*Second Division.*

## I. ETYMOLOGY.

## A. The Noun:

- 1, classification: *a*, proper; *b*, common; (*a*), collective; (*b*), abstract; (*c*), infinitive [see verb];

**NOTE.**—Secure definitions by practical drill.

- 2, properties: *a*, number; (*a*), singular; (*b*), plural; (1), regular; (2), irregular; (3), foreign words;

**NOTE.**—Let the drill on the formation of plurals be exhaustive.

- b*, person—distinguish the three persons by exercises; *c*, gender: (*a*), show the true meaning of gender; (*b*), show by practical drill the three methods of distinguishing the masculine from the feminine; *d*, case: (*a*), nominative; (*b*), possessive; (*c*), objective;

**NOTE.**—Thorough drill on the possessive should be insisted upon, distinguishing especially the three uses.

- e*, copious written exercises on the declension of nouns; *f*, diagram for purposes of parsing.

## B. The Pronoun:

- 1, define the classes: *a*, personal; *b*, relative; *c*, interrogative;

**NOTE.**—By copious exercises, let the student be led into definitions.

- 2, written declension of pronouns; 3, show the double office of the relative; 4, special drill on the double construction of *what*, and the compound relative; 5, diagram.

## C. The Verb:

- 1, classification: *a*, as to form: (*a*), regular; (*b*), irregular; *b*, as to meaning; 2, properties: *a*, voice; (*a*), active; (*b*), passive;

**NOTE.**—Teachers should not allow their classes to leave this drill until they *know* it is understood.

- b*, mode: (*a*), indicative; (*b*), imperative; (*c*), subjunctive; (*d*), potential; *c*, tense: (*a*), simple forms: (1), present; (2), past; (3), future; (*b*), compound forms: (1), present-perfect; (2), past-perfect; (3), future-perfect; *d*, special forms: (*a*), infinitive [see noun]; (*b*), participle [see adjective]; *e*, principal parts, make this familiar by oral and written exercises; *f*, conjugation: (*a*), let drill, by copious written exercises, be employed; *g*, diagram.

## D. The Adjective:

- 1, classification: *a*, qualifying; *b*, limiting; *c*, participial [see verb]; 2, property: *a*, comparison: (*a*), terminal; (*b*), word prefixed; 3, written exercises in comparison; 4, diagram.

**E. The Adverb:**

- 1, classification: *a*, time; *b*, place; *c*, cause; *d*, manner and degree;
- 2, property—comparison: *a*, diagram.

**NOTE.**—For conjunctive adverb, see conjunction.

**F. The Preposition:**

- 1, by written exercises, show the character of the relation.

**G. Classification of Conjunctions:**

- 1, co-ordinate: *a*, copulative; *b*, disjunctive; *c*, adversative; *d*, causal;
- 2, subordinate: *a*, substantive [that]; *b*, adjective [relative pronoun]; *c*, adverbial [conjunctive adverb]; *d*, conditional.

*Third Division.***I. SYNTAX.**

Exercises in the correction of false syntax should be insisted upon through the entire course. Dictate exercises in composition, and require critical attention to spelling, punctuation, capitals, paragraphs, and the principles of construction.

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**ORTHOGRAPHY.***First Division.***ORTHOEPY.**

Instead of giving a full outline of sounds and their description, it was thought best, by the committee, to refer the instructor and pupil to the dictionary, which is, or ought to be, in the hands of every teacher.

The study of the dictionary is of the greatest importance, and should occupy all the time necessary.

Give occasional drills in correcting words commonly mispronounced.

Become acquainted with the diacritical marks and learn their names.

Classify the vowels by giving each prolonged vowel and its abrupt cognate.

Classify consonants by giving each sub-tonic and its cognate atonic.

Classify consonants with reference to the organ of speech mainly used in the production of each.

*Second Division.***ORTHOGRAPHY OR SPELLING.****I. CAPITALS.**

- 1, give ten rules for the use of capitals; 2, give examples under each.

**II. PUNCTUATION.**

- 1, name and make the marks used for punctuation; 2, give rules for use; 3, give examples of each.

**III. SYLLABICATION.**

- 1, give rules for syllabication; 2, classification with regard to number of syllables.

**IV. RULES FOR SPELLING.**

- 1, give lessons from which to derive the prominent rules for spelling; 2, give six rules; 3, give lessons from which to derive the principal exceptions; 4, give exceptions to each rule.

## V. METHODS OF TEACHING SPELLING.

## A. Oral Spelling:

- 1, spell for a head mark; 2, choose sides; 3, correction by the teacher (?); 4, self or class—correction; 5, suggest other methods.

## B. Written Spelling:

- 1, manner of discovering errors: *a*, writing words on blackboard; *b*, spelling by the teacher; *c*, spelling by individual members of the class; *d*, exchanging slates or papers; *e*, suggest other methods; 2, manner of correcting errors: *a*, concert spelling; *b*, writing incorrect words a certain number of times; *c*, suggest other methods.

*Third Division.*

## WORD ANALYSIS.

## I. DEFINITIONS OF TERMS.

## II. CLASSIFICATION.

## A. As regards form:

- 1, monosyllable; 2, dissyllable; 3, polysyllable; 4, rules of syllabication.

## B. As regards derivation:

- 1, primitive; 2, derivative: *a*, primary; *b*, secondary; 3, compound.

## C. Derivatives: how formed:

- 1, stem or root; 2, prefix; 3, suffix.

## D. Stems or roots; give examples of each:

- 1, Anglo-Saxon; 2, German; 3, French; 4, Latin; 5, Greek.

## E. Prefixes; give examples with meaning:

- 1, different languages; 2, changes on account of euphony, as “ad” to “af” in affirm.

## F. Suffixes; give examples with meaning:

- 1, different languages.

## G. Analysis of words given by the teacher, analyzed by separating into the different parts, meaning of each and of the whole.

## H. Synthesis; teacher give:

- 1, root or stem; 2, prefix; 3, suffix; 4, prefixes and suffixes, and let the pupils make the derivatives and give the meaning.

## PHYSIOLOGY.

## I. FRAME-WORK OF THE BODY.

## A. The skeleton:

- 1, head: *a*, cranium; *b*, face; *c*, ear; 2, trunk: *a*, spinal column; *b*, ribs; *c*, sternum; *d*, pelvis; 3, extremities: *a*, upper; *b*, lower; 4, form, use, composition and structure of the different bones.

**NOTE TO THE INSTRUCTOR.**—This outline should be extended by the learner. A moderately complete and minute amplification throughout the subject, should be required.

## B. Muscles and tendons:

- 1, use; 2, arrangement; 3, kinds; 4, structure.

## C. The skin:

- 1, use; 2, structure; 3, hair and nails; 4, mucous membrane; 5, teeth.

## II. VITAL PROCESSES.

## A. Digestion:

1, organs: *a*, stomach; *b*, intestinal canal; *c*, liver; 2, processes: *a*, mechanical; *b*, chemical; 3, results: *a*, chyme; *b*, chyle; *c*, lacteal fluid.

## B. Circulation:

1, organs: *a*, heart; *b*, arteries; *c*, capillaries; *d*, veins; *e*, lymphatics; 2, processes: *a*, *mechanical*; *b*, chemical; 3, results: *a*, supply of nutriment and removal of waste; *b*, lymph; 4, trace the course of the blood.

## C. Respiration:

1, organs: *a*, trachea; *b*, bronchi; *c*, lungs; *d*, air-cells; *e*, capillaries; 2, processes: *a*, mechanical; *b*, *chemical*; 3, results: *a*, pure blood; *b*, elimination of impurities.

## III. SPECIAL SENSES.

## A. The eye:

1, coats: *a*, sclerotic; *b*, choroid; *c*, retina; 2, lenses: *a*, aqueous humor; *b*, crystalline lens; *c*, vitreous humor; 3, how we see; 4, arrangements for protecting the eye.

## B. The ear:

1, parts: *a*, tympanum; *b*, Eustachian tube; *c*, bones of the ear; *d*, labyrinth; *e*, cochlea; 2, how we hear; 3, arrangements for protecting the ear.

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 PENMANSHIP.

## FIRST LESSON.

Advise regarding provision of the suitable materials and appliances, viz: best paper; fine and flexible steel pens; the common steel spring and wood pen-holder; ink which is not injured by freezing; blotting-paper and pen-wiper.

Explain best position for pupils while writing, and dwell upon the importance of all these points for the cultivation of correct habits.

Then practice—preferably with the lead pencil—the “free-arm” “muscular,” and “finger” movements, explaining each and urging the cultivation of the muscular, to the exclusion of the finger movement, in ordinary writing, as far as practicable.

## SECOND LESSON.

Class practice with pen and ink all the exercises.

Present and practice the following, *always* giving the best methods of explaining and illustrating each principle and letter.

1st and 2d, or “*m*” and “*i*” principles.

*m, n, u, v, w, x, i, t, r, s,*

*murmur, summit, wrist, six.*

## THIRD LESSON.

3d principle, or oval, and combinations.

*o, e, c, a, d. Concerts. Adamant. Successors.*



## FOURTH LESSON.

4th principle, or loop.

*j, b, l, h, k, y, g. Bubbling. Hillocks. Injury.*

## FIFTH LESSON.

Modified loops.

*f, p, q, z. Fifty puzzling questions.*

## SIXTH LESSON.

Left oval capitals.

*O, D, C, E, H, D.**Ononwa, Delaware, Colorado, Empire.*

## SEVENTH LESSON.

Right oval capitals.

*J, Q, Z, M, N, U, Y, V, W, X.**Jamaica, Zanesville, Mississippi, Vermont.*

## EIGHTH LESSON.

Capital stem letters.

*I, G, H, K, S, L.**Iowa, Keokuk, Lake Superior.*

## NINTH LESSON.

Capital stem letters—continued.

*T, F, A, M, N, P, B, R.**Toronto, Portsmouth, America.*

## TENTH LESSON.

Straight stem capitals and other modified forms which may be desired.

*P, B, R, T, F, G, H, K.**Baltimore, Georgetown, etc.*

## DIDACTICS.

*The Philosophy of Education.*I. THE SUBJECT OF EDUCATION—*The Human Being in Childhood and Youth.*

- A. His educational susceptibility:
  - 1, a constitutional and fundamental quality; 2, the basis of all growth.
- B. This susceptibility considered:
  - 1, as to his body: *a*, its growth from infancy—how? *b*, its adaptability under training to all requirements; 2, as to his mind: *a*, its growth from infancy—how? *b*, in the individual, its adaptability, under education, to all requirements more limited; *c*, common characteristics of the race; *d*, special characteristics of the individual.
- C. Classes of mental faculties or of phenomena:
  - 1, the universal phenomenon, consciousness; 2, attention; *a*, its importance the foundation of all intellectual greatness; *b*, its relation to consciousness, including: (*a*), observation; (*b*), reflection; (*c*), memory, retention of cognitions; 3, how attention may be deepened: *a*, repetition—not of mere words, but of vivid views of ideas and thoughts coupled with language; *b*, reflection; *c*, association; 4, how secured: *a*, a fixed determination on the part of the teacher to have it; *b*, a clear knowledge of the lesson at ready command; *c*, a suitable interest excited concerning the subject taught; *d*, the eye free to view all and each in the class; *e*, the manifestation of earnestness; *f*, a simple manner and style; *g*, the removal of all obstacles.
- D. The intellect:
  - 1, the senses: *a*, enumeration of them and function of each; *b*, the information gained by them necessary and antecedent to all external knowledge; *c*, their systematic cultivation—object lessons; 2, memory: *a*, its nature; *b*, its importance for intellectual strength; *c*, its cultivation; 3, the reflective faculties: *a*, the synthetic process—generalization; *b*, the analytic process—reasoning.
- E. The sensibilities:
  - 1, the emotions: *a*, their nature; *b*, classification; 2, the affections: *a*, their nature; *b*, classification; 3, the desires: *a*, their nature; *b*, classification; 4, the will: *a*, the elements involved in the act of the will: (*a*), motive; (*b*), choice; (*c*), execution; *b*, the regulation and culture of the will; 3, value of strong will-power under the guide of conscience and reason.

## II. DISCUSSION OF WHAT EDUCATION IS.

- A. It has special departments:
  - 1, physical; 2, intellectual; 3, æsthetical; 4, moral.
- B. It is a result consisting of:
  - 1, development; 2, discipline; 3, strength; 4, skill.
- C. It is a process consisting of:
  - 1, teaching; 2, training.
- D. Principles regulating teaching and training:
  - 1, special principles—the intellect in particular: *a*, in childhood the perceptive powers are very active, so are comparison, memory, and the imagination; *b*, ideas of the outward world are obtained by perception; *c*, ideas thus obtained form the foundation of intellectual growth; *d*, a well-chosen system of object lessons (form, number, color, things, etc.,) should form a part of primary instruction; *e*, language should

not precede the evolution of ideas and thought, but accompany them; *f*, the mind has no pleasure in confused and indistinct impressions, and cannot be benefited by them; *g*, every subject should be reduced to its elements and one thing taken at a time: proceed step by step; *h*, out of the known evolve the unknown; *i*, order must be observed. First objects, then names; thoughts, then sentences; knowledge, then definitions; facts, then laws; phenomena, then principles; concrete ideas, then abstract; sometimes wholes, then parts, constituting analysis; sometimes parts, then wholes, constituting synthesis. Hence the error of committing to memory definitions, rules, and formulæ, without their meaning having been discovered; *j*, memory is assisted by repetition, reflection, association and action; *k*, "each process of instruction should include full perception, distinct understanding, clear expression, and when possible, the passing of thought into action"; 2, general principles: *a*, education is based on the constitutional nature of the child, the peculiarities of each sex and of each child should be carefully studied; *b*, education pertains to the whole organism; *c*, the desire of children for muscular movement must not be repressed, but regulated; *d*, all education consists in doing and not doing, or exercise and inaction. What is desirable is improved by activity; tendencies to be repressed are kept dormant. This is the law of habit and experience; *e*, all activity should be pleasurable and varied; *f*, the child is not a passive recipient of external influences. The root of the work is in the scholar and not in the teacher; *g*, the teacher must have the voluntary and active co-operation of the pupil; *h*, the office of the teacher is to set the mental machine in motion; to bring forth the forces; to apply them in an efficient manner, in the right proportion and in the right order; *i*, all school doings and school sayings must be made pleasant; *j*, school government must not admit any despotic or cruel tendencies; *k*, example is more weighty than precept.

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## SCHOOL ECONOMY.

### I. ORGANIZATION.

#### A. Provisions relating to order:

- 1, the seating: *a*, the teacher has a right to seat the school in a manner that will promote the greatest good; *b*, suggestions as to plans of seating; 2, school evolutions: *a*, evolutions for the whole school; *b*, evolutions for classes; *c*, recitation tactics for each subject, as reading, penmanship, arithmetic, geography, etc.; 3, treatment of privileges: *a*, general principles concerning privileges; *b*, method of granting them: (*a*), going out; (*b*), leaving seats; (*c*), speaking, etc.; 4, the programme should provide for: *a*, opening and closing exercises; *b*, intermissions; *c*, recitations; *d*, study; *e*, transaction of general business; *f*, administration of discipline; 5, attendance and tardiness: *a*, the necessary records; *b*, manner of keeping them; *c*, notices to parents, publication of "Honor Rolls," etc.

**II. DEPARTMENT.**

- A. Inculcate general morality—instruct in cardinal virtues:
  - 1, truth; 2, purity of speech; 3, love; 4, good nature; 5, industry; 6, temperance; 7, politeness; 8, honesty; 9, integrity; 10, preferring one another.
- B. School morality:
  - 1, put behavior at school on the law of morality—wrong doing in school deportment *is sin*; 2, instruct as to neatness, promptness, quietness in walking, whispering, laughing, handling books and slates, etc.; observance of school plans.

**III. STUDY.**

- A. Branches to be studied in the school.
- B. Branches to be studied by each pupil.
- C. The formation of classes.
- D. Examinations, oral and written.
- E. Recitation records.

**IV. GOVERNMENT.**

- A. The objects of government:
  - 1, to teach that government is supreme; 2, to cultivate the habits of obedience and subjection; 3, to facilitate the employments of the school; 4, to promote the general good.
- B. Means of preventing offenses:
  - 1, suitable accommodations; 2, qualified teachers.
- C. Good management:
  - 1, have a definite understanding with pupils as to all rules and regulations; 2, conduct the school according to your sense of the fitness of things; 3, make it appear that you entertain large expectations of your pupils both as to study and deportment; 4, maintain your system and adhere to your programme; 5, practice self-denial for the good of your school; 6, be in no haste to inflict punishment, especially corporal punishment; 7, let your administration be wise, certain, consistent, and uniform; 8, display charitable, generous, and kind feelings, and not an exacting, severe, and authoritative manner; 9, so dispose your management that your pupils go through their duties without seeming to be guided; 10, let all learning, as far as possible, be a process of delight; 11, mind little things.

**V. ELEMENTS OF GOVERNING POWER.**

- A. The teacher must have system:
  - 1, time for everything; 2, place for everything; 3, method for everything.
- B. Energy.
- C. Vigilance.
- D. Firmness:
  - 1, a will of great strength, but not obstinate; 2, decisions must be made with certainty and must be enforced steadily, wavering is fatal; 3, a firm hand in government is a source of pleasure to pupils because it is a source of certainty and security.
- E. Confidence:
  - 1, in the triumph of duty faithfully executed; 2, in self; 3, in pupils: *a*, pupils are generally undervalued as to latent power; *b*, offenses by mistakes and inadvertency generally outnumber those committed by design and malice; *c*, give more attention to the dull and vicious than to the apt and moral.

- F. Self-control:
    - 1, self-possession of your intellectual forces; 2, impatience must be repressed; 3, anger must be crushed; 4, allow no antagonisms between yourself and pupils and parents.
  - G. Personal influence:
    - 1, bring moral, social, and intellectual worth to your support; 2, maintain cheerfulness; 3, withhold nothing in your power.
  - H. Culture:
    - 1, refinement in manners; 2, pleasant tones of voice; 3, avoid affectation; 4, consideration of the wants and comforts of all.
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## GENERAL INSPECTION.

### I. THE SCHOOL ROOM.

- A. Size.
- B. Light.
- C. Heat.
- D. Ventilation.
- E. Seating.
- F. Neatness.
  - 1, books; 2, desks; 3, floor.

### II. THE MANAGEMENT.

- A. System. Is it thorough, judicious, and well understood?
- B. The programme.
- C. Evolutions:
  - 1, school as a whole; 2, classes; 3, going out and coming in.
- D. Requests.
- E. Management of outer apparel.

### III. POSITION AND ATTITUDE.

- A. Of teacher.
- B. Of pupil.

### IV. THE MATTER OF THE LESSON.

- A. Is the teacher familiar therewith?
- B. Is he deeply interested?
- C. Are the pupils interested?
- D. Do they comprehend it?
- E. Is the matter suitable in kind and amount?

### V. THE MANNER OF THE LESSON.

- A. Is the teacher confident, earnest and cheerful?
- B. Are his thoughts and language clear?
- C. Is the order of development good? Is the teacher working in the light of true didactic principles?

### VI. QUESTIONS.

- A. Are they true in form?
- B. Is there a tendency to use the leading question? The informing question? The "Is it not" question?
- C. Does the teacher repeat the answer of the pupil?

**VII. THE PUPILS.**

- A. Are they putting forth a memoriter process only?
- B. Their position—standing or sitting?
- C. Does the work seem to drag, or is it lively?

**VIII. BLACKBOARD WORK.**

- A. Does the whole work present a systematic appearance?
- B. Is the writing well formed?
- C. Are the spaces between the pupils equal?

**IX. SIGNALS.**

- A. Are they many?
- B. How given?
- C. What is the plan of each maneuver?

**X. THE GOVERNMENT.**

- A. As to system.
  - B. As to firmness.
  - C. As to obedience.
  - D. General spirit in school and out.
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The fitting of our teachers for country schools has been improved very much by the training secured in the normal institutes. An additional means of preparing this class of teachers might be secured by granting boards of directors in country districts the privilege to send one or more scholars to a graded school in the vicinity, and to pay out of the district treasury the tuition of such scholar or scholars. At the present time, it is often the case that one or two advanced scholars in a country school require an advanced teacher, who is very apt to spend too much time with such advanced scholars to the detriment of the large majority of smaller scholars. The extra pay given for the more advanced teachers would, in many cases, more than pay the tuition charged in a graded school.

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**GRADED AND HIGH SCHOOLS.**

The graded schools of our State, as of other States, have made almost constant progress; they are generally in the hands of the best professional teachers in the land, who are seconded by professional men as directors having an interest in the education of the children of the community, and the ability to manage school work.

It is with pleasure that we can state that these educators of experience and ability have always been willing to aid the efforts put forward

by those who have the more immediate charge of the elementary or country schools. Many of the principals and city superintendents are engaged as instructors and conductors of institutes, and they co-operate in nearly all cases with the county superintendents in all the efforts needed to elevate the educational interests of the county. Fortunately for our State, the question of sustaining a high school is left entirely to the people of each locality.

Under section 1726, the board of directors *may establish graded or union schools wherever they may be necessary, and may select a person who shall have the general supervision of the schools in their district, subject to the rules and regulations of the board.*

This section applies to country districts also, but is more especially made use of by city districts.

The general tendency to diffuse and to enlarge beyond the financial ability and the necessities of the case, has provoked some antagonism to the high school system, which we hope will not destroy the schools, but lead them to their legitimate sphere. A town should not attempt to support a course which terminates with a single scholar, or two or three. Full classes are needed both for securing interest and for financial support.

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### COUNTRY SCHOOLS.

We have improved our school-houses, we have better furniture and apparatus, we have better trained teachers, and still the progress made in our country schools is not such as the friends of the system desire.

So long as a teacher is employed for only one term, without hope of ever acting as teacher for that school again, he will have but little ambition and encouragement to introduce improved methods, and will prefer to follow the beaten path to get along with the least amount of friction. A greater permanency of our country teachers in the vocation and in the district is absolutely necessary for improvement.

Another very serious drawback is the tendency to divide and subdivide the district until many of our schools are so small that they lack interest and have not the financial ability to pay living salaries. The minimum number of persons of school age required to establish a sub-district or to build a school-house, should be changed for all our older counties from fifteen to twenty-five or thirty. In our new counties this number is, perhaps, large enough.

There is a great lack of uniformity in the work of our country schools; to avoid this and thus improve the schools, county superintendents have worked for the last year or more to secure a course of study for ungraded schools. This course I have thought best to incorporate in this report to make it accessible to all superintendents, and others desirous of using the same. To make this course effective, each teacher should have a record for the use of his successor, in which the degree of advancement of each scholar should be stated, so that the work may be continuous although the teacher changes.



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COURSE OF STUDY AND MANUAL  
FOR THE  
UNGRADED SCHOOLS,  
OF THE  
STATE OF IOWA.

PREPARED BY A COMMITTEE OF COUNTY SUPERINTENDENTS.

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## P R E F A C E .

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THE design in preparing this course of study is to establish, if possible, a more uniform classification, and introduce more systematic methods of teaching and governing the public schools of the State.

Nearly all of our ungraded schools are commenced and ended as though they were the first, and would be the last, ever taught in the district. There is usually no record of progress made, or anything to indicate the limit reached by the school under the supervision of the teacher, and none is left for the succeeding one. Instead of each teacher beginning where the preceding one left off, and of having the benefit of his experience and judgment by following a uniform course, having in view the same objects, he is compelled to grope his way in the dark, and squander much valuable time by his random efforts.

The county superintendents of the State, seeing and realizing the great disadvantages under which the rural schools are operated, concluded to make an effort by means of a course of study, toward grading, systematizing, and unifying the work of the country schools. In accordance with this plan, seven county superintendents, from different sections of the State, were detailed to prepare a course of study. But, subsequently, it was found that such a large committee, scattered over the State, was unwieldy. Consequently, the undersigned were appointed, and hence this is our reason for presenting this manual to the county superintendents, teachers and school officers.

The committee acknowledge their indebtedness for valuable assistance to Superintendents E. Miller, of Page county, and Z. T. Hawk, of Crawford county, members of the former committee, to the Superintendent of Public Instruction, C. W. von Coelln, and to such others as have contributed material encouragement or counsel.

If these suggestions, cautions and remarks, although imperfect, tend to call more general attention to the growing importance of our rural schools, and cause them to become more productive of good and lasting results, the undersigned will consider themselves well compensated for their efforts.

H. D. TODD, Sigourney.	} <i>Committee.</i>
C. H. CLEMMER, Davenport.	
N. W. BOYES, Dubuque.	

### SCHOOL MANAGEMENT AND GOVERNMENT.

"As the teacher is, so is the school," is a trite saying, the truth of which none will question.

See to the orderly management of everything. Have a place for each pupil to hang his hat and wrappings, put his books, to sit or stand in his class, and see that his place is kept.

Have a regular time for reciting, and, if possible, for studying every lesson.

See at all times that the best of care is taken of the school property.

Always keep the school-room neat and clean; ornament it with pictures, mottoes, maps, charts, wreaths and flowers.

Always call and dismiss your classes in order; count, or tap the bell as signals.

Be firm and kind. Don't scold. Be prompt in everything. Your pupils will often follow your example.

Do not allow communication, leaving seats, going out, or getting water during school hours, without permission.

System, self-possession, energy and kindness on the part of the teacher are the disciplinary agents.

Profitable and constant occupation is the true preventive of disorderly conduct.

Have every pupil secure a slate and pencil, and be sure he uses them.

Have as few classes as will be consistent with the wants of the school. A teacher cannot teach a successful school and hear thirty or thirty-five recitations daily.

See that the room is properly ventilated—about 65° or 70° Fahr. is the proper degree of temperature.

Have the syllables of all words pronounced, or teach pupils to make a slight pause between syllables.

Do not have your pupils report "perfect" and "imperfect." It leads to habits of lying and deception.

All the pupils of the same class should pursue the same studies, if possible.

Don't forget to have the general exercise for the whole school each day. Use the oral and general exercises provided for each grade, for the whole as far as practicable.

"Order is Heaven's first law," and *without* order no school can succeed. The first step in governing a school is to govern yourself.

Have written examinations once a month for the larger pupils, and oral examinations for the smaller ones.

Every teacher should be a regular reader of at least one educational journal.

Always be a living model for your pupils, whether in or out of school.

Begin school promptly at nine o'clock and close at four.

Visit your patrons frequently and urge them to visit your school.

Visit some of the best schools you can hear of each year, and don't fail to attend the normal institute.

Make a full report at the close of your school to the district secretary.

Fill out a complete record of the advancement of each grade, according to the plan shown in the blank form printed in this book, and leave it in the register for the use of your successor.

1. Regulations should be:  
  - a*, few; *b*, general; *c*, popular; *d*, practicable; *e*, calculated to form good habits.
2. Teachers and pupils should observe:  
  - a*, regularity; *b*, promptitude; *c*, decorum; *d*, morality; *e*, quietude.
3. To prevent disorder, the teacher:  
  - a*, should be a thorough scholar; *b*, should prepare his lessons; *c*, should be skillful in teaching; *d*, should see that pupils are comfortable; *e*, should see that all have plenty to do; *f*, should thoroughly inspect all work.
4. Punishments:  
  - a*, should be reformatory, never vindictive; *b*, should assist the pupil to self-control; *c*, should be a natural consequence of the offense; *d*, should be mild but certain; *e*, should be accompanied by the kind word and the firm hand; *f*, should be infrequent.
5. Injudicious punishments:  
  - a*, unusual punishments; *b*, cowardly punishments, such as continual threatening and scolding; *c*, cruel punishments; *d*, degrading punishments; *e*, vindictive punishments.
6. Judicious punishments:  
  - a*, reproof: (*a*), general; (*b*), private; (*c*), public; *b*, privation; *c*, corporal punishment; *d*, suspension.
7. The teacher:  
  - a*, should have good manners; *b*, should have good habits; *c*, should be a scholar; *d*, should plan and execute well; *e*, should have self-confidence; *f*, should have self-control; *g*, should be firm; *h*, should be consistent; *i*, should be courageous; *j*, should be just; *k*, should be tolerant; *l*, should be kind; *m*, should be patient.

## THEORY AND PRINCIPLES OF TEACHING.

Teach but one new thing at a time, and always in connection with what the child already knows, that each fact learned may be an additional link in his chain of information.

Give occasionally one minute to the prompt utterance of the sounds of the letters; one to drawing map of the township, county or State; one to repeating maxims, verses, or choice selections in concert.

Let singing have some time each day, and have physical exercises occasionally.

Cultivate the voice, eye, ear, and hand; avoid loud, harsh speaking or singing.

Let about half the spelling in the different classes be in writing.

Give the falling inflection when pronouncing words for spelling; have pupils lower the voice when spelling.

Have pupils rely on themselves when studying and reciting; don't hear a lesson unless it has been well studied; primary classes may be excepted from this rule. *Always give short lessons.*

Give object lessons frequently to your schools; use objects often when teaching arithmetic, and sometimes use them in geography and grammar classes.

Give instructions frequently in morals and manners; use the dictionary, school apparatus, etc.

Avoid reciting for a pupil or class; it will do the pupil no more good than to eat his dinner for him.

Teach your pupils how to study and to think systematically and connectedly.

In orthography, teach the elementary sounds and their representatives. One cause of so many poor spellers is a lack of familiarity with the sounds of the language, and the principles and rules of orthography. Teach pupils to spell phonetically; call especial attention to substitutes, as *e* for *a* in prey, they, etc.; to silent letters and syllabication.

In reading, the teacher should have a variety of methods; he should not sit as a judge merely, but as a teacher, that the pupil's voice, understanding and perception may be cultivated and developed; that the gems of thought, the beauties of language, and the golden truths of the authors may not pass unnoticed or unappreciated. In no branch of study is a teacher more needed than in reading. One sentence well read is better than any number of pages read without regard to the natural tones of the voice, to emphasis, inflections and modulation.

In arithmetic, the principles should be distinctly stated, and problems selected as illustrations, remembering that one principle well understood will be of more value to the class than a hundred problems solved without reference to principles. Drill the class, if possible, on each principle, both by the oral and written methods, and often take for illustrations examples other than those found in the regular textbooks.

In teaching geography, begin at home, and as you widen the field teach less in detail. Care should be taken to get the locality of every place well fixed in the mind. Map drawing, topical recitations, historical events, are prominent points for the teacher's consideration.

In grammar, commence with language lessons, sentence building, and changing sentences and expressions. The art should precede, or at least be taught with, the science of language.

The theory taught should be supplemented by actual practice. Much drill in writing sentences and original productions, with thorough criticism, is indispensable to the pupil who acquires ability in the correct use of language.

The topical method of teaching history is considered the best. Draw an outline map on the board and write the principal events and dates, connect geography and history as much as possible. Teach the connection that one event has with others, and if possible get at the reason.

In teaching physiology, begin as a carpenter does to build a house, with the frame (skeleton) and build upon that the different systems, as the muscular system, the nervous system, and detail the members of the class, as a master builder would his assistants, to explain and discuss appropriate parts.

To teach is to impart knowledge—to exhibit impressively. Teaching is more than merely telling or communicating. It means to inculcate, to impress by frequent repetition, to urge on the mind, to lead out and to develop.

The true teacher in any branch of study or with any class will observe the following statements:

1. See that the lessons are properly assigned.
2. See that pupils in reciting or discussing a subject use proper language.
3. See that the recitations are as nearly perfect as possible under existing circumstances.

4. Teaching pupils to draw their own conclusions properly, stands above almost any other consideration.

5. Be thoroughly in earnest, and your energy and spirit will cause interest and enthusiasm in the class.

6. Grade your school, for by it you will be able to reduce the number of recitations, give more time to each recitation, favor more thorough work, systematize the operations of school, and improve the discipline.

7. Classify according to scholarship, natural ability and age. Make reading and arithmetic the basis of your classification.

8. Use school records to furnish a history of the school and of each individual, to indicate to the teacher when he should put forth greater effort, to furnish information to parents, and to furnish educational statistics.

In making your records, mark only absentees, by making a dot in the left upper corner of square, for tardiness in the forenoon, and in right upper corner, for afternoon.

We cannot do better than to give the principles of the *art of teaching*, as found in the didactics, by Prof. J. H. Thompson, in the course of study for institutes for 1878.

*Principles* to be thoroughly understood by every teacher:

1. Activity is the law of childhood, accustom the child to do, and educate the hand.

2. Cultivate the faculties in their natural order, first *form* the mind, then *furnish* it.

3. Begin with the senses, and never tell a child what he can be led to discover readily for himself.

4. Reduce every subject to its elements, one difficulty at a time is enough for a child.

5. Proceed step by step, be thorough, the measure of information is not what the teacher can give, but what the pupil can receive.

6. Let every lesson have a point, either immediate or remote.

7. Develop the idea, then give the term, cultivate language.

8. Proceed from the known to the unknown, from the particular to the general, from the concrete to the abstract, from the simple to the difficult.

9. First synthesis, then analysis, not the order of the subject, but the order of nature.

10. Fasten every principle by frequent repetition.

*The objects of recitation* are, to find the daily standing of the pupil, to create self-dependence, to estimate the daily progress of the pupil, to direct the pupil's mode of thought and study, to keep proper incentives before the pupil, to aid in discipline, to add new matter, to impart moral truth, and, in primary classes, to instruct, to drill, and to test.

*Questions* should be varied, logical, be given to pupils in a promiscuous order, be put rapidly, and should not hint the answer.

*Moral teaching* should not be neglected. Direct instruction may be given in a few set lectures, anecdotes or biographies of the great and good, at recitation time, in reading lessons, etc., or from books on morals and manners. Indirect instruction is given by the personal influence of the teacher, and by the personal influence of the pupils on each other.

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## COURSE OF STUDY.

### PRIMARY CLASS.

#### *Regular Lessons.*

(All the regular lessons may be heard at the same recitation in the lower classes.)

*Alphabet.*—Letters in words from blackboard, primer or charts.

*Spelling.*—Spelling words in lessons, forward and backward.

*Reading.*—Pronounce all words used in lessons at sight.

#### *Oral and general lessons.*

(All the general lessons in this course may be used for the whole school.)

*Writing.*—Print small words of lessons, and make figures.

*Numbers.*—Count to 100 and back; add and subtract small numbers, using objects, such as books, pencils, pieces of chalk, hats, words and letters of spelling and reading lessons.

*Language.*—Correct manner of speaking, if wrong. Punctuation marks in lesson. Every answer should be a full sentence.

*Place.*—Locate objects in school-room and vicinity. Teach points of compass, shape of the earth, directions on maps.

#### *Directions for teaching this class.*

To teach the alphabet, begin with small words, the names of familiar objects, as ox, ax, box, etc., and after the first lesson introduce but one new letter at a lesson, with others that are known to the pupil. The new letter each time may be printed with colored crayon; take first the small letters of the alphabet and those simplest in form. When several letters and words are learned form them into a sentence, and teach the letters, spelling and reading at the same lesson.



Secure *prompt* and concert action, and make the recitations short, spirited and lively; have as much variety in each lesson as you can.

Have pupils speak each word in a natural tone, and teach them to read as they talk; have them make figures and print on a blackboard or slates; teach them first to understand *what* they read and then have them read in a *natural* way. Use a combination of the word, sentence, and phonetic method.

Provide work for them at their seats, such as drawing, printing, writing, making figures, etc. If they have no work let them go out doors.

Have this class recite four lessons a day, if time permits; give them three lessons, at least.

#### FIRST READER CLASS.

##### *Regular Lessons.*

*Reading.*—First reader and blackboard. Articulation. Modulation.

*Spelling.*—By letters and by sound from reader. Spell all words in lesson thus far.

*Writing.*—Print part, or all, of spelling and reading lessons. Write the small letters of the alphabet.

##### *Oral and General Lessons.*

*Numbers.*—Add, subtract and multiply small numbers; use both the oral and written method. Give them miscellaneous exercises in counting. Count by twos to 100, commencing at 0 and then at 1, and go backward by subtraction. Write and read by the Arabic method to 100; Roman method to X.

*Language.*—Capital letters; talking on objects; punctuation marks used thus far, name and use.

*Place.*—Locate objects in school-room and vicinity; points of the compass; shape of the earth; directions on maps; motions of the earth.

*Form.*—Straight, curved, parallel, oblique, vertical and horizontal lines. Round, oval, angular, concave, convex, conical and arched figures. Draw outlines illustrating each form, and cite other examples.

##### *Directions for teaching this class.*

Occasionally print the difficult words of the reading lesson on the board before reading, and have them spelled and pronounced a number of times; secure a prompt recognition of words.

Cultivate the eye, the ear and the voice; don't allow pupils to point to the words when reading; let them find the lesson by page and number.

Teach them how to emphasize the important words; teach them how to find them; let them always give the right inflection.

Copy part of the lesson on slates or blackboard each time; recite the spelling from the slate in the class, then spell orally. Teach this class the vowel sounds, with words in which the sounds occur.

Teach form in writing and drawing; secure uniformity in height, width and slant in the small letters. Teach each pupil to write his or her name.

Perform the operations in numbers promptly; accuracy and rapidity are the main points to consider.

**Frequently give talking lessons to your class; let them use correct language in talking to you.**

**Illustrate motions of the earth by globe, ball or apple; draw maps of school yard, district, township, etc., on the board.**

#### SECOND READER CLASS.

##### *Regular Lesson.*

**Reading.**—Second Reader. Emphasis, inflection, class drill.

**Spelling.**—Spelling-book and reader, and words from reader, sounds of letters, etc.

**Writing.**—Writing on slates and blackboard, write in copy-books with lead-pencils.

##### *Oral and General Lessons.*

**Numbers.**—Exercises, oral and written, in the fundamental rules. Multiplication table to the 6's. Count to and from 100 by threes, fours and fives, commencing at different numbers, as 1, 2, 3, 4, etc. Writing and reading by the Arabic and Roman methods; laws and principles of each method.

**Language.**—Write abstracts of reading lessons; answers to questions in all grades should be in the form of complete sentences. Use of capitals at the commencement of sentences, proper names, etc. Use of period, interrogation and exclamation points. Oral and written corrections of common errors in speech, and descriptions of familiar objects.

**Place.**—Geography of the school-district, township and county. Begin with the section of land on which the school-house stands. Outline of State geography. Explain the causes of day and night.

**Form.**—Make figures of leaves, trees, cups, shrubs, flowers, fences, and houses.

**Human Body.**—Principal divisions, and use, as head, trunk and extremities.

##### *Directions for teaching this class.*

Let some part of the reading lessons, and all of the spelling lessons which are copied, be read from the slate or paper. Cause the pupil to know the word at sight and also to know its meaning. Let pupils frequently give the substance of their lessons in their own language before reciting. Cause them to make a slight pause at a comma, a little longer one at a semi-colon, and still a longer one at a question mark or a period. Don't let them stop any certain length of time at any of the grammatical marks. Occasionally commit to memory some of the best portions of the lessons and recite them.

Teach this class spelling by sound; teach them also the most important of the diacritical marks. Let considerable of the spelling be in writing. Dwell on words of special difficulty, those spelled alike but pronounced differently, and those pronounced alike but spelled differently.

In writing and printing secure neatness, so that each pupil who passes from this grade shall be able to write and print *legibly* and read writing *promptly*. Let the hand move freely and easily in writing and drawing.

Give random exercises in counting; add columns of figures *rapidly*. Have tables of weights and measures learned *thoroughly*.

Use outline maps a few minutes each day if any are furnished; if not, draw them on the board and drill the whole school at the same time.

## THIRD READER CLASS.

*Regular Lessons.*

*Reading.*—Third Reader. Modulation, inflection, emphasis.

*Spelling.*—Spelling-book and reader, and words from reader, principles and definitions.

*Writing.*—Copy-books, or paper, with pen and ink.

*Arithmetic.*—Primary book. Mental and written exercises on the fundamental rules. Finish multiplication table, count to and from 100 by sixes, sevens, eights and nines. Compound numbers, fractions, factoring, longitude and time, L. C. M. and G. C. D.

*Oral and General Lessons.*

*Language.*—Oral and written descriptions; narration of incidents, reproduction of incidents read to the pupils. Point out the *action*-, *quality*- and *name-words*. Essays on familiar subjects.

*Place.*—Changes of seasons, principal natural divisions. Outlines of the United States, North America, etc.

*Form.*—Outlines of familiar objects, as flowers, fishes, boxes, blocks, barrels; sketching from models.

*Human Body.*—Name and location of bones, senses and organ of each.

*Miscellaneous.*—Lessons on air, snow, water, heat, cold; also talks about animals, birds, fishes, reptiles and insects.

*Directions for teaching this class.*

See that the class brings out the sense and meaning of the lesson when reading. Cultivate taste by having part of the best pieces memorized; recite in a natural tone of voice. To get a pupil to emphasize the right word, frequently ask him a question that will cause him to emphasize the right word in his answer.

Study carefully the meaning of words from the context. Spell by sound, and review the marks of letters and all other marks and characters used therefor. Copy lessons frequently, and in oral spelling guard against unnatural tones and drawling.

Be sure that each pupil holds his pen correctly and sits in an upright position. Drill on the system in writing. Occasionally count for your pupils when writing.

Give promiscuous exercises in mental arithmetic. Drill on principles and analysis, and have them give the reasons.

Let pupils bring to the class declarative, interrogative and exclamatory sentences; give form of analysis for essay writing.

In drawing, have each pupil prepare models for inspection.

## FOURTH READER CLASS.

*Regular Lessons.*

*Reading.*—Fourth Reader. Articulation, emphasis and modulation continued, and vocal culture.

*Spelling.*—Spelling-book and reader; principles of orthography and rules for spelling.

*Writing.*—Copy-books, position, movement, slant, spacing, shading and analysis.

*Arithmetic.*—Fractions, common and decimal, or compound numbers simple and compound proportion, percentage and its applications, with oral and written exercises.

*Geography.*—Elementary text-book. Finish United States and North America. Learn outlines of South America, Europe, Asia, and Africa. Longitude, latitude, natural features and divisions.

*Grammar.*—With or without text-book. Capital letters, punctuation, essay and letter writing. Teach the *use* of language. Have much criticism.

*Oral and General Lessons.*

*Form.*—Scrolls, domestic utensils, outlines of birds, with instruction in shading.

*History.*—History of county, and of Iowa; Columbus and his discoveries. Speak of John Smith, Wm. Penn and others; Indians.

*Human Body.*—Teach them the location and principal functions of the main organs. Speak of the circulation of blood, digestion, respiration; rules of hygiene especially.

*Miscellaneous.*—Speak of dew, frost, ice, hail, rain, rainbow, light, gravitation, electricity, and colors.

*Directions for Teaching this Class.*

Teach pupils to read understandingly. Have them give substance of lesson orally, and occasionally write a synopsis. Memorize short extracts. Give vocal exercises, such as phonic analysis, at least once a week. Give attention to and explain all conventional marks used in lesson. Give attention to rhetorical pauses, compass and volume of voice, with pleasant, natural tones. Teach pupils to *think*, to *understand* quickly, and to *feel* what they read.

At least one-half of the spelling should be in writing. Let the pen move more freely and easily when writing. Look to neatness, beauty and form in all written exercises. Practice on principles and use copy-books containing copies, capitals and small letters in sentences.

Teach the same topics at the same time in both mental and written arithmetic. Have pupils furnish original examples for each rule and principle, if possible. Assist a pupil *only* far enough to enable him to master the point in question himself. Develop principles first. Pay especial attention to analysis. Test the pupil by giving examples not in the text-books.

Omit small rivers, unimportant towns and cities, and all impractical questions; dwell on important facts. Draw maps twice a week, and use outline maps and globe if you have them. Locate principal rivers, places, mountains, etc.

In grammar, have pupils write essays, letters, abstracts, etc., and hand to the teacher for criticism. Teacher should give models for criticism, and have pupils inspect, correct and criticise the work and manuscripts of others of the class. Have pupils frequently reproduce selections read to them from reading book, using capitals, punctuation marks, etc., correctly. Aim to teach the *use* of language as it occurs in every-day life. First examine the meaning of a word, then its use, and finally its grammatical connections and classifications.

Encourage drawing by collecting the best specimens, and commending such as merit praise.

In physiology, always illustrate by example, or by chart, if possible.

## FIFTH READER CLASS.

*Regular Lesson.*

*Reading.*—Fifth Reader, vocal culture, delivery, style, stress, quantity, quality, gesticulation, etc.

*Spelling.*—Spelling-book, technical terms of all branches studied. Review principles of orthography and diacritical marks.

*Writing.*—Business forms, analysis of letters, shading, capital and small letters reviewed. Teach letter writing.

*Arithmetic.*—Finish and review the practical arithmetic. Drill pupils on each principle by taking examples of your own, or from some text-book.

*Geography.*—Common school text-book completed; political, mathematical and physical.

*Grammar.*—Practical grammar, containing a thorough analysis of sentences and phrases, both as to form and office.

*History.*—Common History of the United States, including the Declaration of Independence and Constitution complete, and review.

*Physiology*—(*Optional.*)—Elementary text-book, giving prominence to Hygiene.

*Book-keeping*—(*Optional.*)—Practical elementary text-book, containing examples of common business transactions, the science of accounts, and business forms.

*Oral and General Lessons.*

*Form.*—Easy landscape, draw pictures of animals, outlines of persons, and review.

*Miscellaneous.*—Vegetation, grouping and classifying common plants. Naming and classifying different kinds of trees. Collect a variety of rocks and different minerals, etc., for the school-room, and teach pupils the names, process of formation, and particular characteristics of each.

*Directions for Teaching this Class.*

Cultivate a taste for good reading. Make special selections of the different styles of composition by the best authors, and note the application of the style to the subject. Write brief sketches of prominent authors with principal points of interest as regards their writings, lives, etc. Practice recitation and declamation. Prepare frequently one or two sentences from any author for voice drill. Have pupils copy or read selections that seem to contain beautiful or worthy thoughts or ideas finely expressed. Give special and systematic instructions on the principles of elocution. Make pauses and give inflections according to the sense of the reading.

Every pupil in this class should be able to spell and define all the terms used in his studies, and all words in common use in the language. Use dictation exercises frequently. Encourage general and frequent use of dictionary.

Every pupil leaving this class should have the ability to write neatly, spell correctly, fold letters properly, and address them. Practice plain business penmanship, having due regard to legibility, form and neatness.

Teach pupils to give analysis of problems and a reason for each step in the operation when required.

Assign geographical lessons by topics rather than a certain number of sec-

tions or pages. Associate history with geography, illustrate government surveys. Use outline maps and globe if you have them, and draw maps of township, county and State.

Lesson and essay writing should be thoroughly taught and practically applied during the work of the grade. Much practice and criticism will be needed to make pupils proficient.

Give especial attention to all geographical references, also to the "notes" by the author in history lessons; and have pupils write statistics from memory.

Treat the subjects in physiology topically. Oral instruction should be given to the whole school on this branch once per week.

Collect the best specimens of drawing and hang up in the school-room.

Teach all ordinary business forms in book-keeping, as notes, due-bills, drafts, receipts, etc. Call attention to technical terms, explanatory and marginal notes.

## SAMPLE PROGRAMME OF RECITATION AND STUDY.

## FORENOON.

BE- GIN.	LOS- ES.	TIME.	PRIMARY	1st CLASS	2d CLASS	3d CLASS	4th CLASS	5th CLASS
9:00	9:05	5m			<b>Opening</b>	<b>Exercise.</b>		
9:05	9:15	10	Reading, etc.	Reading	Reading	Reading	Arith'ic	Arith'ic
9:15	9:25	10	Printing	Reading, etc.	Reading	Reading	Arith'ic	Arith'ic
9:25	9:35	10	Printing	Numbers	Reading, etc.	Reading	Arith'ic	Arith'ic
9:35	9:50	15	Numbers	Numbers	Numbers	Reading	Arith'ic	Arith'ic
9:50	10:05	15	Numbers	Printing	Numbers	Arith'ic	Arithmetic	Arith'ic
10:05	10:20	15	Drawing	Drawing	Drawing	Drawing	Drawing	Arithmetic
10:20	10:25	5	Gen. Lesson	Gen. Lesson	Writing	Arith'ic	Geogra'y	Drawing
10:25	10:30	5	Recess	Recess	Gen. Lesson	Arith'ic	Geogra'y	Geogra'y
10:30	10:45	15			<b>Recess.</b>			
10:45	11:00	15	Printing	Printing	Writing	Arithmetic	Geogra'y	Geogra'y
11:00	11:15	15	Printing	Writing	Writing	Copying	Geography	Geogra'y
11:15	11:30	15	Printing	Writing	Printing	Copying	Reading	Geog. or His'y
11:30	11:45	15	Numbers	Reading	Printing	Writing	Reading	Reading
11:45	12:00	15	Drawing	Reading	Reading	Reading	Grammar	Reading

## AFTERNOON.

1:00	1:07	7	Reading, etc.	Reading	Reading	Reading	Grammar	Grammar
1:07	1:15	8	Printing	Reading, etc.	Reading	Reading	Grammar	Grammar
1:15	1:25	10	Printing	Printing	Reading, etc.	Reading	Grammar	Grammar
1:25	1:35	10	Printing	Writing	Copying	Reading, etc.	Grammar	Grammar
1:35	1:50	15	Numbers	Drawing	Spelling	Spelling	Grammar	Physiol'y
1:50	2:05	15	Drawing	Reading	Spelling	Spelling	Drawing	Grammar
2:05	2:25	20			<b>Writing.</b>			
2:25	2:40	15	Recess	Recess	Spelling	Spelling	Writing	Physiol'y
2:40	2:55	15			<b>Recess.</b>			
2:55	3:10	15	Printing	Reading	Reading	Writing	Spelling	Physiology
3:10	3:18	8	Reading, etc.	Reading	Reading	Writing	Spelling	Spelling
3:18	3:25	7	Drawing	Reading, etc.	Reading	Drawing	Spelling	Spelling
3:25	3:35	10	Printing	Writing	Reading, etc.	Drawing	Spelling	Spelling
3:35	3:50	15	Numbers	Printing	Copying	Copying	Spelling	Spelling
3:50	4:00	10			<b>General Exercises.</b>			

The condensed type denotes the recitations and the Roman letter denotes what the other classes should study.

Arrange the recitations first as in the preceding programme, and if they are suitable to the school, fix the study afterward.

This programme must be modified to suit the circumstances of each school. Have fewer classes, if possible, and give more time to some of the recitations. If there are other advanced classes, they can recite every other day, alternating with the higher classes given in the above specimen programme. If you are obliged to have more recitations, alternate the more advanced classes with each other.

A copy of your programme should be left in the teacher's register for the use of your successor.



REPORT FOR USE OF SUCCESSOR.

*Advancement and standing of the Primary Class, for the term commencing  
.....188.., and ending .....188..*

Learned all the letters and.....

Can Read.....

Can Spell.....

Can Write.....

In numbers can.....

Language Lessons about.....

Place Lessons of.....

Form Lessons of.....

NO.	PUPIL'S NAME.	AGE.	DAYS PRES.	GEN'L AV.	REMARKS.
1	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....
4	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....
6	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....
8	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....

Rule and fill out a form like the above *for each grade*, and leave it in the register for your successor.



## SCHOOL-HOUSES AND APPARATUS.

There is a general improvement in the school-houses of the State. The log houses are fast disappearing, and neat, commodious buildings are taking their places. The surroundings of many of our school-houses might be improved; the places where the children and youth of the State meet should be made pleasant and attractive. Ventilation is almost entirely overlooked in the construction of our school-houses, to the great injury of the health and comfort of the children. Many of our districts are wasting the money invested in apparatus, because the directors do not provide a place for safe keeping.

## ORGANIZATION OF DISTRICTS.

Our system of organization, as established in 1858, contemplated the township as the unit, with the division into sub-districts. Exceptions to this general arrangement were made in favor of cities and towns, which were supposed to have special wants, that could be provided for only by a special organization, under the title of *independent districts*.

The school law arranged for these two kinds of organizations, recognizing their agreement in many things, and providing for their differences.

The sub-district system has proven objectionable in several ways.

In the first place, the board of directors goes out of existence once a year and an entirely new board comes into power. This leads to a constant change of plans and teachers, in many instances. In the next place, these sub-districts are now frequently formed according to the amount of territory, and frequently without much regard to the number of people to be accommodated. In a congressional township divided into nine sub-districts, each of four sections, it quite frequently happens that a majority of the sub-districts have but a small number of scholars and that the populous sub-districts, being in a minority in the board, are oppressed. They do not receive a fair proportion of the taxes to support their schools. We have had repeated complaints that little towns, too small to organize as independent districts, are supplied with only one teacher, at a salary the same as is paid for the small schools, while he has from 75 to 100 scholars of all grades and ages to instruct and manage.

These objections led to the law passed by the 14th General Assembly allowing the electors of a township to vote whether they would make

their sub-districts independent districts. Many availed themselves of this opportunity and the number of our independent districts increased from 400 in 1872 to 3,138 in 1877. Of course, the former objections were removed, no majority of small sub-districts could now tyrannize over the large sub-districts; but other, and it seems to us, worse features developed under this system. Many small sub-districts were now unable, as independent districts, to carry on their schools for the period of six months as required by law. The expense of paying secretaries' and treasurers' salaries was greatly increased, while at the same time the efficiency of these officers was diminished. There are many of our rural independent districts that have no competent person to manage the finances. In many places where the treasurers are honest men, the districts lose money on account of the incompetency of their officers.

The law unfortunately provided that in an independent district having but three directors, the treasurer and secretary might be chosen from the board. This has been an additional injury to the honest and successful management of the affairs of the district. It has been the belief of all my predecessors and it is mine, that the township should be the unit of our educational system, and that the township district should be managed the same as an independent district without division into sub-districts. This would give us a continuous board, of which only one-third changed every year, it would provide school facilities for neighborhoods instead of for sections of land. We might reasonably expect that the people would elect the best and most competent persons, only one or at most two annually, to serve them for this purpose. I am not now advocating a radical change in the school law to effect this; but if in a few years a new Code should be adopted, or a general arrangement of the school law provided for, these matters should receive consideration.

One of the objections to the organization of these rural independent districts has been that it has seriously confused our law, which was calculated to provide only for cities and towns, when speaking of independent districts. Those rural districts being also named *independent*, of course claimed all the privileges of the towns and cities as far as they applied. The intention of our law-givers was undoubtedly to have rural communities pay for their school-houses as they built them; but under Sec. 1822 of the Code of 1873, these rural independent districts have in many instances contracted a bonded indebtedness.

## INSPECTION.

In all our larger cities and towns we employ superintendents of schools who devote a portion or the whole of their time to overseeing and inspecting the schools, and who aid the teachers in carrying on their schools according to some well developed plan or system. This same work is expected to be done by the county superintendent for our country schools; but the great distances and the large number of schools, sometimes nearly two hundred, renders this work of comparatively little value, and it is not strange that many people declare the work to be utterly useless. This is a great mistake; for without this small amount of inspection our country schools would be less efficient than they are now. A good county superintendent can aid and does aid young teachers very much by his visits, advice and criticism. Besides, he becomes acquainted with the real ability of the teachers to instruct and manage, which is an aid to him in protecting the people against incompetent persons.

We need, however, additional inspection if we desire to elevate our country schools. We ought to have, as assistants to the county superintendents, township inspectors, who have the ability to aid teachers in their work and to judge of their success or failure. Whether we are ready to introduce this feature is a question which I am not prepared to answer.

## FINANCES, TAXATION, AND TREASURERS.

No one can question the desire of the people of this State to secure an education for their children. More than one-half of the taxes levied annually are for school purposes. Of course, a large amount is needed to build the school-houses required by our communities; still about four millions is paid annually for the current expenditures of our schools. My study of the figures presented to us in the reports of the district treasurers, has led me to think that there are extravagancies which should be avoided, and that in many districts the taxes are levied in a very careless manner. The fact that an amount almost equal to 50 per cent of the amount expended annually is in the hands of the treasurers at the close of the fiscal year, requires some investigation. As my reports for 1879 are not completed at this time, I shall use the report of 1878 as a basis. We spent \$5,103,401 for all school purposes, and there were in the hands of the treasurers, on the 15th of September, 1878, \$2,486,482.. Of this sum \$389,456 were left in the school-

house fund. It is my belief that one-half of this sum might profitably be transferred by the electors, at their March meeting, to the contingent or teachers' fund, for it is not needed for building school-houses. Sec. 1717 gives authority for such transfer by the electors at their annual meeting.

While many districts have not a dollar on hand to pay teachers with, the aggregate amount on hand in teachers' fund is \$1,616,410; more than 50 per cent of what is paid teachers during the year. This, it seems to me, is at least \$800,000 in excess of the necessities of the districts, if properly distributed. Districts which have money enough on hand to pay their teachers one year in advance will continue to levy taxes enough to provide sufficient money to pay another year's salary for teachers. There should be a check to such extravagance and carelessness. The defalcations of our district treasurers, which are too frequent to speak well for our State, are caused partly by the ignorance of the treasurers, and partly by the temptations of handling, for private purposes and speculation, public money for which there is no immediate demand.

Some of our best county superintendents and our wisest school-men as well as citizens, have repeatedly urged, that all our school funds belonging to rural districts should be disbursed by the county treasurer directly to the parties who are to receive their pay from the districts. Whether this is wise should be determined by the legislature. It certainly is true, that no greater difficulty would arise to the parties to be paid than they have now to meet. A teacher receives his order or warrant, properly signed by the president and secretary, and tries to find the treasurer; he is away from home or in a distant field; when he is found he has not the money with him, but must go to town to get it from the bank. If the order or warrant was drawn on the county treasurer, with the indorsement that the district has money there, the order will be as readily cashed at any country store as a check on a bank for the same amount.

#### SCHOOL LAWS—CODIFICATION, PUBLICATION, AND CHANGES.

Our school laws have been amended, changed, altered and modified, until they are very difficult to interpret. It seems almost an absolute necessity that they should be codified, and rearranged. This work can be done without any expense to the State, outside of the usual clerk-hire in the office.

The Seventeenth General Assembly gave us no authority for publishing the school laws, and the officers of the districts are now nearly all of them without the laws by which the schools are governed. If it is not desirable that the State should meet the expense of publishing, the boards might be authorized to buy them for the districts and pay for them out of the contingent fund. The cost should cover only the expense.

In my report of 1876-77, I suggested the enactment of a law for granting State certificates, which I again urge upon the legislature as a matter of justice to the teachers' profession.

I hope that the legislature may devise some measures to protect the school-finances better than they are now protected. If it is thought best to let the county treasurer disburse all the school funds for rural districts, we shall not only save the expense of treasurers' salaries, but also prevent the waste which is now so frequently found. If these treasurers are to continue to act as the receiving and disbursing agents of the districts, they should be at liberty to deposit in banks which will give security bonds to the districts whose money they guard.

A bill introduced by the Hon. Edward Taylor to secure the compulsory attendance at school of persons between the ages of eight and fourteen, failed to pass the Senate.

The more I have studied this question, especially in the light of facts as developed by the reports of State superintendents, where such laws exist, the more do I come to the conclusion that compulsory attendance at school cannot be enforced.

All that we wish to secure is the education of the children in elementary branches, and I believe that a law might be made effective which required the examination of children at the age of twelve, whenever a suspicion exists in the mind of the proper officers that their education is entirely neglected. If this fact is established by the examination, the child should be removed from the care and control of parents or guardians and placed under the care and control of parties who should give security for the proper education and training of such child. This is no more interference with parental rights than to remove to the reform school a child whose moral training has been neglected.

One law passed by the Seventeenth General Assembly, Chap. CXIII, referring to the vote of the president in town independent districts having six directors, has been the cause of a great deal of annoyance.

The law was passed to prevent a dead-lock, caused by a tie-vote of the board, and it has had the effect of causing many districts to remain without a permanent organization for months.

If I might make a suggestion, it would be to restore the vote to the president, and to allow the secretary to vote whenever a tie occurs. He must be present and is generally as well qualified to judge as members of the board are, and he has often as much interest in school affairs as any member of the board.

#### WORK OF THE DEPARTMENT.

During the last biennial period our work of correspondence has somewhat increased, as our copies of opinions and official letters will show. We have decided fifty-nine appeal cases. I have visited in 1878, forty-three institutes and held seven county superintendents' conventions. My traveling for this and other educational work amounted to 11,172 miles. During the year 1879, I have held eight county superintendents' conventions, visited forty-four institutes, and traveled for all educational purposes, 10,961 miles. We have prepared twelve complete sets of questions for the examination of teachers, two courses of study for the normal institutes, and have consolidated each year over 8,000 reports of secretaries and treasurers, of which we received copies from county superintendents. We found, that, while it increased our work, much more satisfactory results could be obtained from the original reports than from the consolidated reports of county superintendents. It will be seen from the above short statement that the work of our office is constantly increasing, and that due efforts have been made to become thoroughly familiar with the work of the schools of the State, and to increase their efficiency by personal exertion on our part.

In conclusion, I wish to express my gratitude for and appreciation of the aid rendered me by my efficient deputy, Mr. Ira C. Kling, and my faithful clerk, Mr. J. B. McGorrisk.

## ABSTRACTS FROM REPORTS OF COUNTY SUPERINTENDENTS.

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### ALLAMAKEE COUNTY.

J. LOUGHRAN.

It will be seen from my report that the number of teachers examined is a large increase over last year. The number receiving first and second class certificates is also largely increased.

The institutes of 1878 and 1879 show marked improvement in number attending and in amount and quality of study accomplished by the teachers.

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### BLACK HAWK COUNTY.

J. S. GEORGE.

It has been highly gratifying to me this year to meet with such excellent success in receiving so promptly, as I have, the reports from a very large majority of the secretaries and treasurers of the county.

Their reports have been generally very accurate, and although not sent in by the legally prescribed time, they have been received in time for me to render my report to the State department by the time fixed by law.

My schools are quite variable in excellence, but are progressing as well as one could expect, and are, with a few exceptions, doing good work.

Wages have fallen and are still going down; they have now become so low that many of the best teachers have been driven from the field, and the schools have been materially injured as a natural consequence.

The almost universal practice in this county of having our country schools open during the months of July and August, is proving very



detrimental to them and to our county normal institutes. These summer schools are working a manifest injustice to teachers, and are in my opinion a lasting detriment to the pupils attending them, leaving as they do comparatively nothing but habits of stupidity and indolence. I do think that the money expended for such schools is worse than squandered. It would be much better to open the schools for the young children in the months of September, October and November, and omit the summer term altogether. I have earnestly recommended such a change.

At our county normal a county teachers' association was organized, but for some reason is not yet in full working order. I trust that this will awaken a deeper interest and enthusiasm among the teachers, and aid them in developing their own interests and those of the schools in general.

If something could be done to infuse more enthusiasm into our directors, it would be a great achievement. This I have endeavored to accomplish in various ways, but all efforts thus far have proved futile.

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## BOONE COUNTY.

G. W. LLOYD.

The general aspect of educational interests in Boone county does not differ greatly from that which I reported last year. Still there is a noticeable advance, not, perhaps, so much in popular interest as in the work which the teachers have done and the interest which they have taken in their work. This was very apparent at our recent institute. The attendance was steady, and with few exceptions the work was faithfully and conscientiously done, both by instructors and teachers. As the institute of 1878 told beneficially in a very marked degree upon the schools of the county, so I look for the same results during the current year as the effect of the institute of 1879, though it will be under the supervision of another man whom the electors have chosen to serve an apprenticeship to the office.

Besides the handsome high-school building and a substantial and commodious ward school-house in the city of Boone, six new school-houses have been built in the county during the past year, each of



which has been furnished with the better class of seats and desks, a decided advantage on former years.

There is still the old difficulty in getting reports promptly from many of the school officers. The work is out of their ordinary line of business, and perhaps for this reason is taken hold of reluctantly; indeed, as it seems, deferred until the last minute. I suppose there is no remedy for this but time and the inevitable progress it will bring.

You admonish county superintendents not to indulge in personal adulation. I have no doubt the admonition is necessary in some cases. It is not, however, one of my failings. Moreover, I study brevity when I have time to do so. I have taken enough for that purpose now, though it is a late day to report.

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## BUCHANAN COUNTY.

W. E. PARKER.

The reports of secretaries and treasurers are more satisfactory this year than heretofore, yet the secretaries' reports are manifestly incorrect in many cases, as regards the enrollment, attendance, and averages.

These errors are mainly caused by the teachers' reports to the district secretaries. It seems to me the matter of the teachers' "Term Report" should receive some prominence among the questions for examinations; and no teacher who cannot correctly make out a report should be permitted to teach.

Whatever may be done in special directions for the elevation of our common schools, no very decided improvement will be made until the directors are competent, and faithful in the discharge of their duties. Some of these directors understand school work, and secure practical and effective results from our common school system; they employ good teachers, support them, and consequently have good schools. Many employ a teacher, and then give the schools no more attention. If they happen to get a good teacher, things go on well; they may have a good school for one term, but the next three or four terms their schools are signal failures.

Some directors employ a relation or friend as teacher, provided he can secure a certificate, and in some cases persons are employed without certificates, contrary to law; and the district loses the money which

ought to have secured them a good school. We have a case in point. Last summer a young lady came to the teachers' examination and presented a petition, signed by every elector in the district, praying that the bearer be granted a certificate to teach. Her examination showed that she had not even a respectable acquaintance with the rudiments of the common school branches; and when she was informed that she could not receive a certificate of any grade, she simply remarked, "they want me to teach, and I *will* teach, anyway." It is needless to add that she did keep school and received the money. A similar case occurred. A teacher gave up her school about the middle of her term; the director put his sixteen-year-old daughter in to complete the term; no one objected, and of course she drew the money. Incidentally, it may be remarked here that the superintendent should be empowered and directed to close all such schools. While such cases do not very frequently arise in any given county, it should be rendered impossible for any such case ever to occur.

The law should in some way recognize the services of directors, that competent and interested persons may be induced to serve as directors. If nothing more can be done in the way of acknowledgement and remuneration, they might be relieved from road work while serving as directors.

Upon the State list of questions, I have nothing to offer; but it would seem, since teachers are required to develop mind, they should have some acquaintance with the laws of its operations and development. The teacher should be required to pass an examination in the elements of mental philosophy.

It is not better scholarship that we need to make the schools more effective, so much as a knowledge, on the part of teachers, of the laws of mental growth, and tact and skill to use scholarship so as to secure the mental growth of their pupils, while teaching them the common branches.

The rule which forbids the granting of certificates to males under nineteen years and to females under seventeen years, is a good one, because it presumptively gives us teachers of more mature judgment. We would add to the efficiency of our schools by requiring females to be at least eighteen years old before receiving certificates. In most of our older counties we have a surplus of teachers, anyhow.

In the case of young teachers the law should forbid the renewal of certificates. This important matter should not be left to the discretion of superintendents. The young teacher should study. The great ad-

vantage of these examinations, if rightly considered, is to secure study on the part of teachers. The student-teacher will generally interest and benefit his school:

Our schools suffer for the reason that experienced teachers do not long remain in the work. Any means which will induce them to remain longer will elevate school work. A system of State certificates would help this matter.

After a person has taught in the common schools for five years, or ten terms, with satisfaction, and can pass a rigid examination in the elements of mental philosophy, higher arithmetic, and elementary algebra, in addition to the branches now required by law, he should receive a State certificate authorizing him to teach in any of the common schools of the State without further examination. There should be a time in the life of every earnest teacher, when he shall be exempt from these annual examinations.

Let the State certificates be of two grades, and but two; one for the common schools and one for the graded schools. This will be one step—and a long one—toward elevating teaching to the dignity of a profession.

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## BUTLER COUNTY.

J. W. STEWART.

During the past year the general cry among farmers and business men has been "hard times," yet, notwithstanding all this, our educational interests have prospered nicely. Our teachers, as a class, have done better work, have been more thoroughly in earnest; our educational meetings have been better attended by them; they have done more visiting among the patrons of their schools than usual, and the result has been that the patrons have taken more than usual interest in the schools; teachers' term reports show a much better attendance. In a number of country schools the average attendance has reached 85 per cent of the number belonging; and, on the whole, I feel that more has been accomplished, educationally, than during any of the preceding years of my superintendency.

The school-house at Butler Center was burned down on last Christmas night, but, thanks to the wisdom of the board of directors, it was insured, and within sixty days from the date of the fire, they had two

thousand dollars in the treasurer's hands with which to erect another, and for twenty-three hundred dollars they have built the neatest and finest two-room school-building in the county. Three other very neat and commodious school-houses have been built in the county during the year, seated and furnished with the best school furniture in the market. A number of old school-houses have been repainted, reseated, and the surroundings made more pleasing and attractive. All these things denote an increased interest in educational matters.

Our normal institute for 1879 was well attended, and was in every sense a success. I had a good corps of instructors, and all in attendance were well satisfied and felt that "it was good to be here."

Secretaries' and treasurers' reports have reached me in much better shape and more nearly on time this year than usual, and I have now some hopes that the time may come when we can get these reports in time to forward our reports to the State department at the time required by law.

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## CEDAR COUNTY.

MISS E. E. FRINK.

Although I cannot challenge criticism upon the educational work of Cedar county during the last four years, I believe that there is a constantly increasing interest manifested, and that it is shown not only by those who are actively engaged in school work, but by the citizens of the county generally.

Notwithstanding the pressure of the times, several new school-houses have been erected in the rural districts, of which the patrons of the schools may be justly proud. A beautiful and commodious edifice is in process of erection in Tipton, and will be ready for occupancy on the first of January. School apparatus is being supplied with greater liberality than ever before, and in many townships uniformity of textbooks has been secured, which will materially lighten the teachers' work.

THE CEDAR COUNTY TEACHERS' ASSOCIATION is still in a prosperous and healthy condition. Since my last report we have held five meetings, with varying degrees of advantage to those concerned. The majority of them have been profitable and interesting, owing to the

freedom with which opinions have been expressed and views interchanged. The educational column in the *Tipton Advertiser* has been well sustained, and has formed a "bond of union" between the teachers of the county.

As regards our normal institute, I am in doubt what to say. If the number in attendance is to be considered the measure of our success, then, indeed, it has not accomplished for us what it ought to have done; but, if punctuality and a faithful and earnest endeavor on the part of those who were present to obtain a knowledge of the newer and better methods of teaching, are to be considered in our favor, then I believe we have gained from it all that could be expected.

I prepared a course of study for the ungraded schools of the county this year, and placed it in the hands of the teachers at the close of the institute. The design of it is to systematize and unify the work, that the greatest possible good may be obtained for the money expended to support our schools, and if it accomplishes this purpose even to a limited extent, I shall feel that the work has not been in vain.

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## CHEROKEE COUNTY.

W. F. ROSE.

During the past year the number of pupils in the county has increased from 2254 to 2417, an increase of 163, or over seven per cent. Seven new school-houses have been erected, besides various enlargements and improvements of older buildings. Six schools are conducted in other than school buildings.

Many of our teachers are successful laborers in the school-room, yet by far too large a number deem their duty done when they have listened to the recitation, and will not take hold of the work of class-drill with the desired energy and efficiency.

We believe the superintendent should be clothed with greater power, to reject the inefficient teacher though capable of passing the most thorough examination. Thousands of dollars are thrown away every year by employing those who possess neither the natural nor the acquired abilities so necessary for success.

We have resorted to both oral and written examinations, always endeavoring to keep the oral fully abreast with the written.

There has been a manifest advance in the intellectual and practical

attainments of a large number of the teachers, yet many have remained stationary. We believe they should be rejected after one or two trials.

On the whole we think the grade of our teachers and schools is rising, and hope to see the day when none but those thoroughly efficient will even dare apply for a school or a certificate.

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## CLAY COUNTY.

S. GILLESPIE.

The last year has been a reasonably successful one in educational work in Clay county. There has been an increase of one hundred and forty-two persons of school age since my last report. In addition to this, three new sub-districts have been organized, and five new country school-houses have been built, and extensive repairs made on many others. The last of the sod school-houses has disappeared, and every sub-district in the county, with one or two exceptions, is now provided with a good frame house, furnished with improved furniture. A handsome and commodious graded school-building has just been completed in the village of Spencer, and a competent corps of teachers employed, and it is believed that the good results of this school will be felt in all parts of the county.

In the financial condition of the schools of the county there is a marked improvement; teachers are no longer compelled to sell their orders at a ruinous discount, but are paid promptly at the end of each month, when they so desire. Every district in the county has cash on hand in the teachers' fund, and the same is true with reference to the school-house and contingent funds, with two exceptions. In three townships it was found unnecessary to levy any school tax the present year, sufficient funds being in the hands of the treasurers to meet all demands. It will thus be seen that the burden of taxation which existed in former years for school purposes, is no longer too grievous to be borne.

The character of the work in the school-room during the past year is a manifest improvement over the work of former years. This is accounted for, in a large degree, by the influence of our normal institutes, which are very generally attended during the entire session, by the teachers of the county. Several of our teachers have also availed

themselves of the advantages offered by the Iowa State Normal School, and the eagerness with which the services of such teacher is sought clearly indicates that the public mind is not slow to appreciate the value of the trained and skillful teacher.

But one appeal case has been tried in the county during the year, and that was finally amicably settled. It is to the absence of such disturbing elements that the prosperity of our schools, in a large measure, is due.

In a few districts, the economy mania seized the school board and teachers' wages were considerably reduced; but the experience of one year, we are convinced, will teach such persons the error of their way.

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## CLINTON COUNTY.

M. J. WILCOX.

We have used every reasonable means of securing our reports, properly corrected, and feel that a reasonable degree of success has attended our efforts. Many were wrong when first received, but we do not wish to take time and space, as many others do, for the purpose of complaining of our school officers, since these gentlemen have faithfully co-operated in our undertaking to submit a correct report, and are in no manner derelict in their duties. In our judgment the school-house and contingent funds ought to be consolidated, which would dispense very largely with the practice of transferring money from one fund to another, and render the account system much easier for school officers to keep. With two funds instead of three, much of the present labor and perplexity could be avoided.

The educational interests of Clinton county are steadily advancing. The abolition of the third-class certificate, which occurred at the close of the normal for 1878, and a close observance of 80 and 90 as minimum standards for second and first-class certificates, has met with general approval by both patrons and teachers. As a result of this step our schools are in the hands of better teachers, and at present we have but few more than are required to supply the situations. Of



this number we take pride in saying that a large majority possess the broader and more expanded ideas of educational work.

The subject of teachers' wages has been agitated in this county, as well as elsewhere; perhaps more from fear of an attempt to reduce the wages than for any other reason, for a comparison of our reports with those of preceding years shows no general reduction of wages, and we do not find any serious disposition on the part of our patrons to reduce wages below their present standard.

It shall be our effort to commission the best talent to teach our schools, and doubt not that it will be duly recognized, appreciated, and fully remunerated. However, it is a deplorable fact that the teachers' work as to merit is often too slowly recognized, for the simple reason that people do not visit the schools enough to judge intelligently of their true condition. We have advised our teachers to use every effort to secure frequent visits from the patrons of their schools, believing this to be the best way of securing a recognition of merit and pay accordingly. In this county, as in many others, the propriety of the normal institute has been questioned, but now that it is fairly established and its benefits so apparent, the voice of opposition has nearly subsided. It is our firm conviction that the question of making the attendance compulsory and conveying the idea that a person should attend in order to secure a certificate, has had more to do in bringing the normal institute into ill-repute than any other feature of its existence. We are not in favor of conveying either of the above ideas in the absence of any necessity for so doing. Teachers who are constantly availing themselves of every source of normal instruction are fast superseding those who pay little or no attention to it. This fact gives permanency to the normal institute, and establishes the true condition upon which it should be attended.

Our school-houses are in good condition. There are many new ones, all of which are real objects of pride.

In conclusion, we look with pride on our county's educational condition, and it shall be our constant endeavor to continue our work acceptably in the sight of the people, with a view of accomplishing the greatest good, irrespective of fear or favor.



## DELAWARE COUNTY.

R. M. EWART.

This year the secretaries and treasurers have been unusually prompt in forwarding their annual reports. Nearly all were received within the time specified by law, and none were delayed much beyond that time. The reports were carefully made out and were generally correct.

In looking over the past four years, we can see a marked improvement in educational matters throughout the county. In that time twenty new school buildings have been erected. These are all neat, comfortable and commodious, and are furnished with the latest style of school furniture. A number of old buildings have been repaired and refurnished, making them as good as new, so that with a very few exceptions school property is in excellent condition.

The location of school-house sites, so as to meet the present wants of communities, has occupied considerable attention, and has retarded in a measure the progress of some of the schools. All these cases will soon be settled and will not be likely to come up in the future. The text-book question has also been decided by the different school boards adopting a uniform series for their schools. The action of the boards is nearly uniform throughout the county.

The standard and efficiency of teachers have increased steadily, and year by year failures are becoming more rare. Teachers are remaining longer in the work than formerly, and the same teacher is often employed term after term in the same school. The Manchester academy and normal school recently established and ably conducted by Hon. A. S. Kissell, formerly State Superintendent of Iowa, will have a good effect on the public schools, as the preparation of teachers is being made a specialty. Lenox College, at Hopkinton, is also doing good work in the same direction.

The normal institute continues to increase in attendance and popularity. At the last session, which was the seventh held in the county, 277 names were enrolled, including nearly every teacher in the county and every teacher employed in the graded and high schools. Our State owes much of its success in educational matters to the normal institute system.

Teachers' meetings have been continued for many years. Six meetings were held the past winter. All were largely attended, and the

exercises were generally spirited and instructive. It has been resolved to hold meetings in all the towns of the county this winter.

At the close of the normal institute a course of study for ungraded schools was laid out and the teachers pledged themselves to introduce it into their schools. The course provides for a uniform classification and lays out the work in the different divisions, but does not limit the teacher to time. This will enable school work to progress regularly term after term, and will avoid the delays and repetitions which have proved so injurious.

It has also been resolved to conduct educational columns in at least two of the county papers. These are ably conducted by some of the prominent teachers, and will aim to present sound views on educational questions valuable alike to teacher and parent.

The educational outlook for the next two years is very encouraging. All efforts can now be directed to the school work proper, and teachers and people are ready to co-operate in all sound measures for the promotion of education. Our people are generally interested and are willing to support good schools in a liberal manner.

Many of our school officers are educational men and work hard and effectively for the improvement of their schools. The effect of good schools is seen and appreciated, and there is now a concert of action which will increase the standing of the schools more than ever before.

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## DICKINSON COUNTY.

H. C. CRARY.

The reports of the district treasurers have been carefully examined, and as far as I can determine are perfectly accurate. Every dollar of money received has been accounted for. The reports of the secretaries, however, contain many and glaring errors. These are the result of neglect on the part of teachers and sub-directors, and in part, of an indefiniteness in the items called for, which can only be remedied by remodeling the blanks sent out or by furnishing a sheet of explanations with each blank. I have received these reports for six years. I know that the men who send them are men of intelligence, and that the difficulty exists in understanding just what is wanted. The schools of

the county are feeling the results of the returning good times and the teachers are showing a commendable desire to improve.

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## FAYETTE COUNTY.

G. W. FITCH.

For the past four years the crops of this county have been very poor, in some portions of the county almost an entire failure. As a result of this, improvements in school buildings have moved but slowly, and teachers' wages have been reduced.

Five school-houses have been built since my last report, all of which are properly constructed, and large enough to accommodate the present and future wants of the districts.

Our normal institute this year was well attended, as shown by report, and much interest was manifested. The most pleasant, profitable and generally successful normal ever held in this county commenced in West Union, Aug. 25, and ended Sept. 4.

Our schools are in fine working condition, and generally supplied with experienced teachers, who have proven themselves successful in the school-room. In the examination of teachers, I find the superintendent's work materially reduced since the passage of the law requiring every applicant to pay an examination fee. Formerly many who had no idea of teaching, or obtaining a certificate, either, would attend to ascertain their standing. Another feature is, that those who hold poorly marked certificates of the lowest grade, have been driven from the profession, to some extent, they not caring to risk the chances of losing their dollar. The result is fewer teachers and better qualifications.

School boards of this county stimulate teachers of the lower grade by generally paying teachers according to qualification. A few districts, however, adhere to the old method of hiring a friend or relative of the influential member of the board, regardless of qualification, and paying such person first-class wages.

We find much difficulty in getting correct reports from secretaries and treasurers. Think the manner of settling the accounts of these officers, as mentioned in the proposed amendments to the school law,

as presented in your biennial report for 1878, would materially facilitate this work, and result in more correct reports.

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## FREMONT COUNTY.

• T. J. BRANT.

Some changes in the law are needed to get reports on time.

The sub-district system should be abolished. This annual change of directors is a curse, and the more frequent change of teachers is injurious to the schools.

There are too many directors that have no interest in schools. One of the qualifications for a director should be that he must be able to read and write.

Make the county superintendent's office an employment, not an office. We need a compulsory attendance law. More than one hundred schools are too many for one superintendent.

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## GRUNDY COUNTY.

G. T. COWGILL.

At present the schools of our county seem to be in a flourishing condition. Our county is small, and in many of our rural districts the attendance is small, but our teachers fully realize the necessity of doing faithful work in the school-room. They have lived to learn that those who teach for pay alone will soon necessarily step down and out of the profession and leave the field to those who not only work for themselves, but for the good of humanity, and are worthy to be called eachers.

In preparing for our recent institute, we endeavored to procure plenty of assistance, so that each instructor would have plenty of time in which to prepare for the duties of the recitation-room. We think that this has had much to do with the success of our normal. During the session we organized a teachers' association, which is an interesting

feature of our school work, and bids fair to inspire new life and energy in the industrious portion of our teachers.

I wish to say a word in reference to the school law. Sec. 1744, S. L., 1876, says the secretary shall notify the county superintendent when each school of the district begins and ends. I think that this report should also give the name of the teacher. If the superintendent is acquainted with the teachers and schools under his charge, it will enable him to determine where he should direct his visits to promote the best interests of the schools in his county.

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## GUTHRIE COUNTY.

G. C. MILLER.

The past school year has been one of progress in the educational interests of Guthrie county. Notwithstanding the general cry of "hard times" and reduction of teachers' salaries, the wages were reduced on an average of only two dollars per month, and this reduction is confined to two or three townships. Competent teachers were secured for most of the schools.

Nearly all of the school districts are out of debt, with balances in the treasury able to pay teachers at the end of each month, a plan generally pursued.

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The plan of reporting through the county papers the condition of the schools, as observed from visitations, has been pursued during the past year, with, I think, beneficial results. The items reported are those of the most interest to the public and profitable to the teachers, commending that which is commendable, criticising that which is wrong, suggesting that which would be profitable and applicable to other schools. By these reports the public become better acquainted with the work of the schools and the general plan of the common school system. Teachers become acquainted with the work of others, and profit by their success or failure.

The normal institute was attended by 143 teachers, the largest number in the history of the county. The system of normal institutes is increasing in favor among the people, as well as among the teachers.

The county high school under the present management is doing well with an attendance of fifty pupils. Professor R. D. Jones is principal, and T. J. Mahoney assistant. The local feelings that have existed to the detriment of the school are not so intense, consequently it is receiving more patronage from the remote parts of the county.

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## HUMBOLDT COUNTY.

J. A. MARVIN.

The educational work in this county falls so far below the standard that I had pictured at the outset that I do not desire to say much about it. That progress has been made is manifest to any careful observer. Much remains to be done, and, above all, public opinion needs to be educated up to that point where the cry will not be heard of—give us cheap teachers. Cheap teachers are the dearest in the end. Our work for the past two years has been mostly primary instruction, or preparing teachers to teach successfully the primary schools. We have sixty-three ungraded schools in the county, and our endeavor has been to place in them teachers who were in earnest in the work—those who were trying to excel. The teachers have aided us by doing their best in a majority of cases, and they have been seconded in many cases by a demand from the patrons.

Our county is farther back in educational matters than would be expected, but looking back at the poverty of the past, caused by remoteness of markets, destruction of crops by insects, and the general stringency of the times, added to a society composed of elements from all parts of this country and the old world, which must needs be worked over into neighborhoods, all working together for the good of each and all. All these are reasons for the backwardness of our schools.

Our two institutes have been very successful, and we feel are inspirations to press onward. The prospect is encouraging, and the probabilities are that the schools will increase in efficiency.

## IDA COUNTY.

T. S. SNELL.

The present school law of the State enables the people to make provisions for providing school facilities for nearly all of the children in the county. However, we think, in two cases, the law could be made better. First, let the people elect the school district treasurer, instead of the board appointing him. Sub-directors are frequently elected, not for the purpose of taking care of the interests of the pupils and school, but for the purpose of appointing some friend to the office of treasurer. The result is, we frequently have sub-directors who have no interest in the schools. Second, could sub-directors be prohibited from employing relatives to teach their own school, unless by consent of the patrons of the school, we think, in many cases, much good would be the result.

Our teachers are doing better work now than ever before, and it is chiefly owing to the drill received annually in our normal institutes.

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## JACKSON COUNTY.

W. H. FORT.

Teachers' wages have been reduced to their minimum, which has been a great detriment in raising the standard of our schools. There has been a gradual diminution in the number of inexperienced teachers not of matured age.

The local associations have assisted very materially in furthering the progress of our schools. The time is very profitably occupied with lectures, essays, criticisms, and discussions. The Bellevue association has conducted an educational column in a local paper during the past year, with satisfactory results.

The normal institute has done more to awaken enthusiasm and real progress than all other efforts combined. The attendance was large. The number enrolled was 187, with an average daily attendance of 161. The work done by the instructors was thorough and complete, considering the time allotted them. The satisfaction expressed by teachers was evidence of success. Instead of employing instructors who sought the position, we selected from the very best teachers of established

reputation. The lecturers were chosen from professional teachers and not from lawyers and doctors.

Two years ago there were not twenty-five school journals taken in the county; to-day there are over one hundred of our best monthlies and weeklies subscribed for.

The county superintendent has been bored, in a few instances, by teachers and their relatives, continually asking, and even authoritatively demanding, special favors because one of their neighbor's girls received a certificate.

The independent rural district system is a nuisance, and the sooner it is abolished the better. We need more efficient school officers and less of them. Our schools, and especially the election of school officers, should be removed from all political influences. Our school laws require changes in this respect. We have too many school laws which cannot be strictly enforced.

A county superintendent should have power to recall a teacher for an examination at any time, if he thinks his qualifications inadequate. The authority of the county superintendent is sometimes ignored and teachers begin teaching without a certificate. There are too many cases of this kind in the State that require the enforcement of the needed laws.

No confidence can be placed in the average district secretary. In one-half of the reports, the number enrolled in the school, daily attendance and average cost of tuition, are incorrect. The treasurers' reports are quite accurate, and there is a decided improvement. Last year there were nearly twenty incorrect; this year there are barely six. Most of the reports have been made quite promptly, but a few must linger. In a few cases, the amount on hand last year does not agree with the amount reported this year, but it is due to previous blunders and errors in their work. Under the existing circumstances, it would be advisable that county superintendents be given until the first of November to make their annual report.

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## JASPER COUNTY.

MRS. M. A. MAYFIELD.

District secretaries and treasurers have been much more prompt in making their reports this year than they were last, and the latter have



been generally correct; not one was accepted until it was made to correspond in every particular with the record in this and the treasurer's office. But of the secretaries' reports I cannot speak so confidently, having no data by which to determine their correctness.

Of the condition of the schools I can say but little. Though I have labored incessantly and conscientiously for their improvement, many are still far from what I would like to have them. Still many improvements have been made in method, discipline, system and neatness in the school-room. Considerable progress has also been made toward securing uniformity in the school work of the county.

A teachers' association has been organized within the past year, which meets regularly, and has been the means of awakening much interest in educational matters throughout the county.

Our normal institute this year was the largest ever held in the county. The enrollment was 311, with an average daily attendance of nearly 280. The work performed by my instructors was of the highest quality, and cannot fail to result in much good to the schools.

The county superintendency might be made much more efficient, were the office entirely removed from politics. The law respecting the time and manner of electing superintendents should be changed. They should also have a fixed and annual salary, and provision should be made for compensating a deputy when one's services are needed.

As the law now stands, examinations are too frequent, and the time given not sufficient for the difficult and important work of selecting thoroughly competent instructors. This I have found to be the greatest need of my county, well qualified teachers, and my efforts to secure only such, have been earnest and persistent. The effort to raise the grade of teachers, though sustained by the intelligent portion of the community, has met with bitter opposition, and has been the basis of much persecution. A great deal has been accomplished in this direction, however. There is not at present a certificate in the county averaging below 75 per cent, on a rigid examination, and very few so low as that; while not a second grade has been issued, for full term, where the applicant fell below 70 per cent in any of the essential branches. The burden and responsibility of examining teachers should be shared by a board of examiners, of which the county superintendent should be a member. There are serious objections to the custom now prevalent of sending teachers' MSS. from one county to another for examination. Were all superintendents equally strict and painstaking

in conducting examinations, much of the objection might be removed. Still those who keep vigilant guard over the interests of their county, would feel great reluctance in placing persons whom they had never seen and of whom they know nothing, except what appeared on the MSS., in charge of their schools. Were all applicants marked strictly on the merits of their MSS., we would not have those who fail in one county go into another and secure a first class certificate, thus bringing county superintendents into disrepute.

More attention should be given in our normal institute to the practical work of the school-room, viz.: keeping records, making reports, suppressing whispering, etc. School directors should receive compensation for the time and labor spent in the performance of their duties.

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## JOHNSON COUNTY.

J. M. CURRY.

Some improvement has been made in the condition of our schools since my last annual report. During this time a course of study has been prepared for the schools of this county. This course of study was made the basis of the work done at the normal institute. It has been adopted by official action of the board of directors in about one-half of the schools in the county. Teachers, generally, do the work indicated in this course of study, in schools where it has not been adopted by action of the board of directors. The improvement made in the condition of our schools is mainly due to the voluntary efforts of the teachers, and not to a demand on the part of the people for better schools.

Ten educational meetings have been held in as many different places in the county during the year. These meetings were largely attended by the teachers and the intelligent persons in the localities where the meetings were held; but there was a noticeable absence of those who assert that the office of county superintendent is a sinecure and should be abolished, and who are continually groaning over their enormous school taxes and lamenting that the common schools of to-day are not as efficient as those of thirty or forty years ago.

The normal institute this year, as heretofore, has been productive of the most satisfactory results. These results are manifest in nearly

every school in the county, in the way of more perfect organization, better methods of instruction, better school government, and more thorough work. These institutes have exerted considerable influence in creating what demand there is for better teachers. A few of the school officers and patrons of schools recognize the fact that those teachers who attend the institute and receive instruction how to teach, are doing better work than those who do not attend but are guided simply by their own experience.

The great obstacle to the proper advancement of our schools to a high degree of efficiency, is the want of interest manifested by the people in regard to them. Competent persons do not like to devote much time to a school director's work when they receive no compensation for it. Hence the schools often drift into the control of incompetent, unprincipled and selfish men, who think their daughters well qualified to teach, though they be ignorant and are far from being the model in morals or manners that we would have our children emulate. This class of men denounce every effort to elevate the work of teaching to a plane above the capabilities of their daughters, to be a fine spun theory that is impracticable in the country schools. What encouragement is there for teachers to make the necessary preparation to do good work and then have their applications for positions rejected by ignorant directors who will scheme to place an unworthy relative, who has not a certificate and is unable to get one, in charge of schools? Is it possible for a superintendent to increase the efficiency of the schools to any great extent by raising the standard of teaching when those in authority are unwilling to have a higher standard? Such obstacles the superintendent has to contend with in this county.

What can be done in the way of legislation to remedy these evils? I would suggest: 1. That there be a reduction in the number of school officers, by reorganizing each township into an independent district, to be under the control of a board of three directors. 2. That a standard of qualification be attached to every school office, and that no person be eligible to any such office who is not qualified to perform the duties required, in an intelligent manner. If the qualifications of teachers are to be ascertained by an examination, why not apply the same test to school officers? 3. That all school officers be allowed a reasonable compensation for time spent in the discharge of their duties.

I would be pleased if some legislative action would be taken this winter that would assist county superintendents and the better class of

teachers in placing our common schools on a higher plane and making them more efficient.

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## KEOKUK COUNTY.

H. D. TODD.

With this report I finish my work as county superintendent. During six years, I have labored to advance the cause of education in Keokuk county. During my service, many of the old and inconvenient school-houses have been replaced by new, modern, and commodious buildings; many have been supplied with needed apparatus; many have been repaired. The normal institute has been established, which gives a new impetus to the school work. A teachers' library of six hundred volumes has been established in the county, and we have at present seventy-five dollars in money. I think that the people of the county, the teachers and the schools, have made commendable progress during the last six years. The course of study used for a number of years has been the means of systematizing the work of our schools and making them more uniform in their operations.

During this year three needed school-houses have been erected. Sigourney built during the year a neat two-story brick building, with four rooms, at a cost of six thousand dollars. This building, together with the other large building of eight rooms, will afford ample room for all the pupils of the district, and the school consequently can be better graded, more systematically operated, and be made to produce better and more desirable results.

I think the bill introduced the last session of the legislature, to have but one school treasurer in a township where each district is independent, should become a law. Great difficulty is experienced in this county, each year, in collecting, correcting, and tabulating one hundred and sixteen secretaries' and treasurers' reports, saying nothing of the loss to the county from various incidental causes, including the compensation for so many officers.

I think the course of study to be sent out by the State department should have a fair trial in each county. If adopted generally, throughout the State, good results will doubtless follow.

Our normal institute was as well attended this year as usual, and was an entire success. The enrollment was two hundred.

## LINN COUNTY.

E. JOHNSTON.

The schools generally in this county are in a good condition, and are fast increasing in interest and efficiency. Our teachers are becoming convinced that thorough preparation is necessary to obtain situations and be retained as teachers. It is but simple justice to mention that those who have attended regularly the sessions of the normal institutes for the past few years are far in advance of those who have not.

I think an amendment should be made to the school law, requiring the secretary to report all that is necessary in each district. It will obviate the necessity of so many being employed in reporting. In this county we have twelve district townships and sixty-four independent districts, making in all seventy-six. The secretary and treasurer reporting from each district, calls into service one hundred and fifty-two men necessary to report to the county superintendent annually, whereas the secretary alone could do the work, thereby saving the labor of seventy-six men, getting better reports, securing them more promptly, and saving the county superintendent much vexation and labor.

The sixth annual normal was a decided success in every particular, greater attendance and more thorough work than ever before. Our instructors were all first class, some of them having been employed in every institute for the last six years. We believe it to be as detrimental to institutes to change instructors as it is to schools to change teachers, when they are doing good work.

## LOUISA COUNTY.

D. HELMICK.

In making out my report this year, I have endeavored to get it as nearly correct as possible. By so doing I have been delayed in reporting. There is a general improvement in the reports of both secretaries and treasurers. Some items are not understood by the secretaries.

There has been one new school-house built this year, a neat frame, in sub-district number six, Grandview township. The new school-building at Wapello is now occupied.

The schools are gradually becoming better. The teachers are taking a deeper interest in their work, and there is a marked improvement.

The institute is growing in favor, and is attended by a greater number of the first class teachers than it was formerly. All are taking a deeper interest in the profession, and striving to acquire methods and means by which they can become more efficient workers, and accomplish a greater amount of good in the future than has been realized in the past.

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## MAHASKA COUNTY.

J. C. WILLIAMS.

The superintendent should have mandatory power while visiting schools. The teacher should not only feel that the superintendent is acting in an advisory manner when he is visiting schools, but also, that he has the power to enforce such advice, if needed. As it now is, a teacher may be radically wrong in some methods of teaching, and the superintendent is powerless to correct it, unless the teacher, of his own good will, sees fit to do so. If supervision is worth anything, it is worth all that it is possible to make it.

I think that the length of time for which certificates are granted should be divided into four periods as to the maximum, viz: six, twelve, eighteen, and twenty-four months. Those having an average of 80 per cent should be granted for six months; of 85 per cent for twelve months; of 90 per cent for eighteen months; and of 95 per cent for twenty-four months. Some such a system would, in my opinion, tend very much to elevate the intellectual standard of our teachers. Let the marking of manuscripts be rigid.

The superintendent of our schools should have a stated salary. It is humiliating in the last degree, to think that of all the county officers the superintendent alone is compelled to swear that his account is just and true. The argument, that, if on a stated salary, he would not put in all his time, is not valid. The same argument would apply against all other officers, while it is both degrading and insulting, from the fact that it questions the honesty of one particular officer.

There should be more effective means to compel district officers to make their annual reports at a stated time. I think an effective pen-

alty would be the loss of the semi-annual apportionment, if reports were not made in time, and the district have recourse upon the officers.

In conclusion, after two years of experience, I firmly believe that the people of this State cannot afford to abolish the superintendency; and in order that its efficiency may be greater, and the respect of the people secured, it should have fuller power to carry out its work.

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## MARION COUNTY.

A. YETTER.

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Farming is the principal business of our county. Of this we feel proud, because it is the great source of subsistence to all other classes of men. The repeated failures, to a certain extent, of crops, have affected injuriously, not only the farmers, but all other classes of men. With us the complaint is scarcity of money and high taxes, and here may be found one of the causes why greater progress and efficiency have not been realized during the past two years. The compensation of teachers has been reduced, thereby compelling them to seek other business pursuits. Upon the whole, I rejoice in being able to report progress in the right direction. A few good school-houses have been erected during the closing year, and quite a number have undergone extensive repairs. The spirit of improvement and adorning has been aroused. We have not been standing idle, but quietly and slowly marching upward and onward. We have many active directors, together with a large number of interesting pupils, all ready to perform their respective duties, when properly marshaled, wisely directed, and sufficiently encouraged.

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## MILLS COUNTY.

W. H. WRIGHT.

I presume the superintendent of Mills county has had no more than his share of vexation from the dereliction of school officers; however, it has been almost impossible for him to obtain reports from each of



the several districts of the county in regard to changes in school officers. The annual reports from most of the districts have been returned with commendable promptness, though some have been very slow and the reports very unsatisfactory. District township reports have come in more nearly on time, and are more nearly correct, than those of independent districts; however, I am partial to the independent system. The business of the independent districts is accompanied by less "red tape"; they pay better wages; appreciate a good teacher; are more particular about the grade of certificate held by an applicant; and more inclined to retain the teacher who has done good work. Somehow the independent system brings the school and patrons more together.

I wish there might be some change made in the mode of conducting examinations, that would serve to divide the responsibility of grading certificates issued. Might not the examinations be conducted by an association of county superintendents of adjoining counties, thus forming a board of examiners? It would tend to secure a uniform grade in the counties so associated, and be a relief in the performance of a very unpleasant duty, the rejecting of the unqualified. It would save individual superintendents much personal abuse.

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## MONROE COUNTY.

A. J. CASADAY.

We find much difficulty in getting correct reports from district officers, particularly treasurers, whose accounts do not balance. I think treasurers should be required to settle and compare their receipts and disbursements with the county superintendent. We are of opinion that examination-day, for several reasons, ought to be in the middle of the week.

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## OSCEOLA COUNTY.

MRS. W. L. PARKER.

The people of this county are reasonably awakened in school matters. Seven new school-houses have been erected during the year. Some school-boards regulate teachers' wages in accordance with the



certificate the teacher holds. It is a fact that a poor teacher is not cheap at any price. Our normal institute for 1879 was the largest ever held in this county, and in earnestness and enthusiasm on the part of the teachers all that could be asked for, consequently the schools are making better progress than formerly.

Our greatest needs are a higher grade of scholarship and a better knowledge of the improved methods of teaching. This could be overcome if we could have good town schools, *such schools* as should be in a county seat, where the teachers could attend during the winter term, at a small expense, or free of tuition. At present, our village schools are no better than the country schools.

One improvement would be uniformity of school books, especially readers and spelling-books.

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## PAGE COUNTY.

E. MILLER.

"We rejoice in the hope" that the course of study now prepared by the State, for ungraded schools, may do something for the chaotic state of our district schools.

The great demand of the time is better teachers; and that we may have better teachers, we must have a better way of examining. There should be a normal department established in the high school in every county seat, and applicants for the position of teacher should be required to teach for a given time under the inspection of the superintendent, and by him or her authorized to teach, if the applicant is found to possess natural ability. This department could be made self-sustaining by changing the normal institute into a perpetual institution of that character.

We have found by experience, that a teacher must have the aforesaid natural ability. Acquired ability is commendable, but it cannot be substituted for natural ability, in the schools. In our present methods of examinations, we cannot determine in regard to the natural ability of the applicant; and as the natural qualification is the more important, it follows, that this qualification should be first sought. It does not require high-toned logic to prove these statements.

## PALO ALTO COUNTY.

LE ROY GROUT.

During the past year there have been fifty-eight schools in session in this county, fifty-seven of which I have visited. In most instances I have found the teachers wide awake and endeavoring to do their duty faithfully and well, though many of them suffer many inconveniences from lack of good tools to work with; many of the school-houses being small and in poor repair; many being totally deficient in some of the imperative necessities, and what some call luxuries, of a school-room.

Our county being composed almost entirely of prairie land, and sparsely settled, causes much inconvenience to pupils in attending, as the school-houses are necessarily located at a long distance from some of the residences; and this is one reason for the small average attendance. In my visitation I have made it a point to try to stir up a greater interest in educational work among the patrons, urging them to visit the school and judge for themselves how the work is being done, and I believe it has produced good results.

Now that we are reasonably sure of no further raids from grasshoppers, for some time at least, and much of our land which has been off the market, now ready for sale, we hope in the near future to make rapid strides in population, and to see the educational interests take a prominence which should be given them everywhere, and that we shall be able to compare favorably with older and more favored sections of the State. Owing to the hard times, teachers' wages have gone down to hard-pan, and in consequence, many of our best teachers are leaving the field to new and inefficient ones. We hope soon to see this system of false economy buried out of sight forever, and the true system of good pay for good work, take its place. Then, and then only, can we expect teachers who will do their whole duty.

## PLYMOUTH COUNTY.

F. W. GUERNSEY.

The general condition of the schools is the same as last year. There has been a gradual increase in the number of schools in the county, but owing to the poor crops and hard times, the length of the terms has been shortened and the wages of the teachers lessened.

Our annual normal institute, although not as well attended as that of 1878, was, nevertheless, a very successful and interesting one to both teachers and instructors. On account of a surplus of funds we were enabled to continue it for three weeks, instead of two, as formerly. The law wherein, at the annual settlement with the district treasurer, he is required to exhibit his money or equivalent checks, is not generally lived up to, and the consequence is that within the last two years we have had three cases where treasurers, as they passed out of office, were unable to turn over the funds.

We ought to have some more stringent law in the case or some different committee ought to settle with treasurers, or they should be prohibited from serving more than two or three consecutive years.

The salary of secretary and treasurer is too variable a quantity. In this county for the small amount of work it runs from \$25 to \$75 per annum. This should not be so. The General Assembly ought to make their salary as fixed as that of other officers.

Some of our boards of directors tax the districts unnecessarily, and thereby carry an unnecessary supply of money. Can they not in some manner be prohibited from levying more than a sufficient amount to run the school in a good manner?

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## POLK COUNTY.

J. H. KOONS.

In submitting the report of the secretaries and treasurers you have doubtless found inaccuracies, some of which it has been impossible to correct, owing to errors in former reports. In endeavoring to correct these, I have found the books in such a shape as to render further efforts entirely futile. I am happy to note, however, an improvement since last report, and believe if officers were continued for a greater period, even under our present system, more accurate reports could be obtained. There will, however, probably, never come a time under this system when these reports will be entirely correct.

The most efficient way to remedy this is to enlarge the powers of the superintendent so that he may have a complete record of the school fund, with power to compel the attendance at his office of officers in settling any discrepancy that may occur in their report. A better dis-

tribution of the school law, so that teachers could become acquainted with its requirements would aid them in making more accurate reports to secretaries, thus doing away with the real beginning of the trouble.

Teachers have been largely aided in their endeavors to improve themselves and render their work more efficient by the normal institutes, which the law provides. If more of the expense were taken off of them and borne by the State, it would seem to be in better accord with our excellent system of public education.

In examinations we have used the questions sent out by the State department. The law requiring annual examinations of all teachers, should be changed. There is a large number of teachers who merit and should have an opportunity of obtaining a State certificate, and thus be relieved from this endless annoyance of an annual examination. We would heartily recommend this for your careful consideration.

Since your last biennial report, nine new buildings have been erected and several enlarged and furnished.

The out-look for the future is brighter than I have ever seen in this county. With harmony among the people, enthusiasm with the teachers and emulation among the scholars, we are looking forward to a year of much fruitfulness.

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## RINGGOLD COUNTY.

W. J. WORK.

The treasurer's report for Washington township does not correspond with that of last year. After a careful investigation I am convinced that the money received has been accounted for, but the different funds were promiscuously expended by the former treasurer. The amounts on hand in Union, No. 7, and Athens, No. 6, were too great last year as shown by examination of the books this year. Several reports show more on hand at last report than was reported at the time. I know you will think the amount paid out for other purposes too large. On inquiry, I find this includes wells, fences, privies and old indebtedness, without a known proper heading.

We have had fewer failures by applicants for certificates, owing to few wishing to pay the one dollar without being prepared for examination.

During our present term we have required a monthly report from each teacher, which has been beneficial to both teacher and pupils, by creating a desire to make a good showing.

Three new school-houses have been built, and two others contracted for. All the new ones and several old ones have bought patent seats, thus showing that our school officers are looking after both beauty and comfort.

You ask for suggestions. I can think of none of more importance than pressing upon the legislature the advisability of consolidating the school-house and contingent funds.

Allow me in closing this, my fourth annual report, to thank you for the many courtesies received from you and your department. I commend my successor, W. E. Andrews, as a man of fine natural ability and thorough education, under whose auspices we hope to see the educational interests of Ringgold county advance more rapidly than they have under his immediate predecessor.

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## SAC COUNTY.

J. DARLING.

We notice many evidences of a marked advance in the interests of education over past years. School officers, generally, manifest more care in selecting teachers; inquiring about their qualifications for giving instruction and executive ability in managing the machinery of our school system, so as to secure the best results.

The practice of employing teachers merely to put them in possession of a given amount of the public funds, we are glad to say, is rapidly going out of use. Another hopeful feature in the public school interests is a manifest determination on the part of teachers to attend, if possible, the county normal institute, looking upon it as a necessity in their calling to be more thoroughly qualified for the proper discharge of their duties as educators of the rising generation.

## SCOTT COUNTY.

C. H. CLEMMER.

Old Scott county reports substantial progress in the noble work of popular education. The school year just closed has been noted for earnest work on the part of the pupils, directors, and teachers. In spite of the "penny wise and pound foolish" theory advocated by a portion of our citizens, school boards with a few exceptions have refused to reduce teachers' wages; in some instances the wages have been increased. This is a compliment to our teachers, and speaks volumes for the intelligence and public spirit of our citizens. Directors are willing to pay good wages for good work. Teachers understand this, and give no cause for a reduction of wages.

Our county teachers' association has proved to be a live organization, and has accomplished much good. During the past year we held five educational meetings, all of which were well attended by both teachers and citizens. The subjects presented were practical, and were handled in an earnest manner. Our normal institute of 1879 was in full keeping with the professional spirit shown by the teachers at these meetings. The enrollment was the highest yet reached in this county, while the instruction of teachers and earnestness of members were unsurpassed.

Several new school-houses have been erected during the past year, one of which deserves notice. It is situated in independent district No. two, Davenport township, and may be called a model school-house. The school board had the good judgment to consult an architect, and as a result they have a building erected with due regard to light and ventilation. It can be ventilated without opening doors or raising windows. Its dimensions are thirty-eight by sixty feet. In addition to commodious halls and ante-rooms, it has an extra recitation room which the construction of a belfry made possible. Visitors who have examined it pronounce it the most complete country school-house in the State. Several houses were supplied with new desks, and many schools furnished with new maps, charts, globes, dictionaries, etc.

The new school-house in Davenport has relieved other schools that were crowded. The schools of this city, under the efficient management of Superintendent J. B. Young, are very prosperous.

I hope that the coming legislature will pass a law consolidating the school-house, contingent, and teachers' funds into one or two funds.

## SHELBY COUNTY.

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M. D. BRIDGMAN.

The educational interests of the county are improving, but not as rapidly as I would like to see them.

Eighteen new school-houses have been erected in the last two years. The county now contains one hundred and one school-houses, most of them good ones. Nearly all of them are well supplied with good furniture, but are wanting in apparatus. We, with probably many other counties in the State, feel the want of better qualified teachers.

I am confident that the teachers of Shelby county will compare favorably with those of adjoining counties, yet our schools would be much more efficient if we could have teachers who had received some normal training. Our normal institutes have been of great advantage to the schools, and as the interest in them increases, their efficiency will increase; yet they can never be made entirely to supply the want of normal schools. One hundred and eight were enrolled at our last normal, nearly double the number enrolled at any preceding one. During the past two years I have used the State questions almost exclusively, and have graded as close as I could and supply all of the schools with teachers. If teachers' wages advance with the return of better times we may confidently expect a great improvement in the schools of the county during the next two years.

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STORY COUNTY.

L. B. BAUGHMAN.

The past year has been to some degree a successful one. Several efficient teachers have been added to our corps; new school-houses have been built of good substantial material, and well seated with patent seats.

My report has been delayed on account of the delinquency of the secretaries and treasurers of the several districts, yet the reports of others have been full and correct.

We have a few liberal school boards in this county, and not a few who still insist on the teacher qualifying himself for the responsible

position, and then laboring for the same money that will hire a boy to plow for the same length of time.

Not many of our efficient teachers have left the field, although salaries have been reduced to a considerable extent.

School officers are giving more attention to their duties, and are laboring to improve and better the condition of the village and country schools in many parts of the county.

A school-building is now being erected at Iowa Center that will be an honor to the place.

The public schools of Nevada and Ames were never more prosperous or in better condition than at the present time. We have located in this county the Iowa Agricultural College. The college has been well attended this year, averaging about 267 students. In the several departments a greater degree of efficiency has been attained, and an increasing interest in the work evinced by both students and the general public. Annually this institution sends out many of the most active and efficient teachers we have in the public schools of the county, and whose good work is felt and appreciated by all who have a deep interest in the general welfare of our public schools.

The normal institute was well attended, and a great degree of interest manifested by the teachers present. We are convinced that the teachers who attend the normal do better work, and should be given the preference in our public schools.

The interests of our schools demand a more rapid advancement, and that school officers be more careful to select their teachers from those best qualified.

Several educational meetings have been held in the county the past year, and were attended with the best results.

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## TAMA COUNTY.

H. A. BROWN.

I wish to speak to our honorable assembly about to convene for legislative deliberation, concerning the execution of certain legal requirements, which place before us impossibilities. I refer to the duty of school visitation. The labor is too onerous—is impossible in most of our counties. As it is, our most diligent service is unsatisfactory to



teachers, pupils, patrons, and, most of all, to the office itself. Believing, therefore, that it will be for the best interests of the schools, I would recommend that the county superintendent be relieved of the duty of school visitation, except as is hereafter provided for:

I. That the superintendent be allowed a salary, of such an amount as will compensate him for service in the office, which, by the per diem now, amounts to from \$500 to \$600 per annum, and a per diem of \$3.00 a day with legal mileage for the visitation of those schools he is requested to inspect by order of the board thereof. Said per diem and mileage to be paid by said board, from the contingent fund of its treasury. Thus, there will be saved to the State, an annual expense of \$40,000.

II. I recommend that the office be removed from the political field, and there be created instead a board of examiners, consisting of three members not holding any other civil office, not being members of a board of directors. Said board to be appointed by the supervisors, at their January sessions; one for a term of one year, one for two, and one for three years; thereafter, one each year at said session. Said board of examiners to have the following powers: 1. To organize before the last Saturday of January, each year, choosing of their number a chairman and secretary, whose official signature shall be necessary to make valid a certificate, or other instrument issued from their office. 2. It shall be the duty of the chairman to hold the normal institute, as provided by chapter 54 of the Fifteenth General Assembly; to visit and inspect schools, at the special request of the board thereof, who shall pay him for such service a per diem of \$3, and mileage to the school inspected as is allowed to appraisers by section 1727, note *b*, School Laws of 1876; to make all reports to the State, and to the several asylums of the State provided for the education of our youth; to entertain appeals, as provided by sections 1829–1836, School Laws of 1876, chapter 41, of the Sixteenth General Assembly; and to perform such other duties as are now required of the county superintendent, excepting school visitation, as is before provided for. 3. The board of examiners shall each receive from the county treasury the sum of \$3 a day for every day necessarily employed in the performance of their official duties, and also, the necessary stationery and postage for the use of their office; *provided*, that they shall first file a sworn statement of the time necessarily employed in their official duties with the county auditor. Thus amending, or repealing sections

1765-1776, we may save to the State at least \$40,000 per year, and do better the duties assigned to this office, and give, we believe, better satisfaction to the public.

III. One of the most perplexing duties of the office is the collecting of the material for the annual report, from the imperfect returns made by the district treasurers. I am convinced that there is a more excellent way, by which we might save from \$1,000 to \$1,500; now paid out for official services, in each county of the State. I refer to the office of district treasurer.

I would recommend to abolish said office leaving the funds in the custody of the county treasurer, and require the respective school boards to draw their orders directly on the said county treasurer. Thus we should lose no funds, and make certain all our fiscal reports.

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## TAYLOR COUNTY.

J. B. OWENS.

I have used every available means to secure correct data for this report; but I find upon comparing, the amount on hand, as reported last year, in many instances, does not correspond with the same item this year.

TEACHERS.—We have an earnest, intelligent, and progressive body of teachers, who take pride in doing their work honestly and efficiently. It has been the object of this office, for the last six years, to so restrict examinations as would meet the standard of qualifications which would admit of only sufficient numbers to fill our schools.

The examinations have not been arbitrarily fixed, but established upon the relative merits of our teaching corps.

I shall never forget the kindness and hearty co-operation of my fellow teachers, and shall ever cherish their memory, in reciprocation for their many kind words and good wishes.

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## UNION COUNTY.

J. D. THOMAS.

The last two years have been years of interest in our educational field. During this time we have built twelve school-houses and remodeled some of the old ones, and supplied them with new seats, etc.

The Schools at Afton and Creston are doing good work, and, as high schools, compare favorably with any in the State. Our teachers, all over the county, had to contend with the reduction of salaries, which at one time threatened to cripple the educational interests. In some cases the boards very wisely reconsidered it, and saw the fallacy of so great a reduction.

Our normals have been a success, particularly so this year. Teachers are awake to the interests of the schools, and, as a rule, have the work at heart. Our school fund has been economically expended, with but one exception. One township treasurer is a defaulter to the amount of over two thousand dollars, but I think all can be saved to the township. It does seem to me that, if there was a law passed to make the treasurer settle with the county superintendent at any time he demanded it, we would hear of fewer embezzlements.

The outlook of our county, from an educational standpoint, is most flattering, and when I step down and out I will have the consciousness of knowing that we have all advanced.

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## VAN BUREN COUNTY.

J. W. ROWLEY.

We are able to report the schools of Van Buren county in fair condition. The teachers have, as a rule, shown an interest in their work, though the compensation they received was very low, and there seems to still be a disposition on the part of many of our school officers to keep wages down. As long as this is continued we cannot expect efficient teachers to continue in their profession. Many of our farmers seem perfectly willing to pay a carpenter two dollars, and two dollars and a half per day, to build a pig-pen, but if such wages should be paid a man or woman for caring for the intellectual and moral welfare of their children, they would begin the cry of extravagance and high taxes. While the carpenter is not paid more than he earns, we must acknowledge that his business does not require any more talent than is required to properly instruct the young, still he is better paid.

Our normal institute was a success the past year, the average daily attendance for the entire month being one hundred and eighty-five. There is a library of about seven hundred volumes which belongs to the normal institute, having been paid for out of the institute fund.

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We sincerely hope our next legislature will do something toward taking the office of county superintendent out of the hands of politicians. It seems to us that the school boards should choose the county superintendent, and the selection of the officer should be in the spring.

The secretaries and treasurers of school boards have been more prompt than usual in returning their annual reports, though in a few instances there has been unnecessary delay.

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## WAPELLO COUNTY.

W. A. M'INTIRE.

I am pleased to be able to speak encouragingly of the schools of Wapello county. We have a better class of teachers and better schools than when I last reported. Although there is yet a great work to be done to make our schools what they ought to be.

The State questions have been a great aid to me in raising the standard of qualification in this county.

Normal institutes are doing a great work, in reforming the methods of teaching in ungraded schools. Our normal this year was more highly appreciated by teachers in attendance than any previously held in the county. It was attended by an earnest, enthusiastic class of teachers, who fully realize the necessity of such a drill as a good normal gives.

We give three grades of certificates. I think this better than to give but two. If we wish a better class of teachers, instead of abolishing the lower grade, make the examinations more difficult, and raise the grade of all.

The burning of the Lincoln school building was a severe blow to the school interests of Ottumwa. But, notwithstanding, provisions have been made for the accommodation of all the pupils, and to Superintendent A. W. Stuart is due great praise for his very efficient management under the circumstances. A new building, which is more commodious and convenient than the old one, is in process of completion, at a cost of \$20,000. When finished, it is the design to move the high school from the Adams to the new building.

Some provision ought to be made for granting State certificates and diplomas to professional teachers.

## WINNESHIEK COUNTY.

N. KESSEY.

No material changes have taken place in our school matters during the past two years.

Teachers' salaries have been reduced somewhat in a few districts; but, I think not more than the reduction for other professions, nor so much.

A few districts pay better salaries at present than they have done for a number of years; and this I think is the experience of all that have worked on the *cheap* plan for a time sufficient to realize the result of *cheap* work.

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## WRIGHT COUNTY.

J. Q. HANNA.

The schools of the county are improving as rapidly as could reasonably be expected in a new county. The teachers are doing better work from year to year, thereby answering the public demand. The townships have adopted a course of study, and the teachers are working with a definite understanding as to what is expected of them.

We have a good class of country school-houses. Many of them are surrounded with newly planted groves, which in a few years will add much to the comfort of the pupils and beauty of the country. There seems to be a growing interest manifested by the people in regard to our schools. The fact is becoming well established that the majority of the pupils must look to the country schools for their education, and much credit should be given to some of those high in authority for the able manner in which they have succeeded in directing the thoughts of the people into this channel. When the people see this subject in all its magnitude, then, and not until then, will they put forth their whole energies to secure the best results.

Some of our educators, whose mental visions have been obscured by dust blown from pages written amid the uncertain surroundings of the old world, seem to be just awakening to the fact, that public institutions in this country have their foundations in the hearts of the people, and that the surest way to improve the schools is to labor earnestly

and faithfully with the people. The schools are and will be just what the people make them.

Some very good work was done at our last normal institute. I consider it one of the most effectual means in bringing up the standard of the teachers' qualifications. It is growing popular with those interested in the schools. Some townships in this county will not employ a teacher who has not attended a normal. A teachers' association was formed in the county this year, with fair prospects of success. To the many friends that I have found among the teachers and superintendents of Iowa I must now say farewell.

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A number of county superintendents did not send their reports until after the first of November, which made it impossible for us to print them.







# APPENDIX.



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1878.

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## ABSTRACT [A]

## SCHOOL

	COUNTY.	DISTRICTS.			SCHOOLS.			TEACHERS.			
		District Townships.	Independent Districts.	Sub-districts.	Ungraded.	Rooms in graded.	Av. duration, months.	Numb'r employed.		Av. monthly compensation.	
								Males.	Females.	Males.	Females.
1	Adair.....	15	10	117	116	3	6.73	103	126	\$32.25	\$28.65
2	Adams .....	8	34	63	91	8	7.07	70	125	31.52	25.31
3	Allamakee.....	9	70	59	125	19	7.09	80	178	34.50	21.43
4	Appanoose.....	13	30	95	118	15	6.40	92	109	30.15	26.23
5	Audubon .....	12	1	49	60	2	6.50	29	66	32.17	28.98
6	Benton .....	10	99	89	180	26	7.40	132	244	32.10	27.11
7	Black Hawk ...	11	55	83	138	37	7.63	86	212	33.83	28.36
8	Boone .....	17	12	134	135	23	7.05	115	156	31.15	26.59
9	Bremer .....	6	58	44	99	21	7.44	51	147	31.67	23.88
10	Buchanan .....	9	62	75	134	22	7.55	92	195	29.10	24.35
11	Buena Vista...	15	8	64	69	7	6.46	40	75	29.92	26.48
12	Butler .....	11	45	79	116	19	7.40	71	158	34.63	26.81
13	Calhoun .....	13	.....	62	67	.....	6.72	48	68	30.00	28.33
14	Carroll .....	15	9	85	96	5	6.73	91	72	32.68	28.19
15	Cass .....	16	3	129	132	16	7.60	103	169	34.07	30.55
16	Cedar .....	12	43	31	131	32	7.44	80	191	39.85	29.40
17	Cerro Gordo...	12	4	78	88	21	7.71	57	147	33.72	26.83
18	Cherokee .....	16	1	75	80	5	6.50	50	94	31.88	27.72
19	Chickasaw .....	5	58	53	106	14	7.11	64	135	31.38	24.31
20	Clarke.....	9	23	74	92	13	6.62	73	102	30.33	25.44
21	Clay .....	9	1	56	57	2	6.40	30	66	27.94	22.74
22	Clayton.....	20	33	133	156	39	7.30	102	183	36.30	27.87
23	Clinton .....	19	35	136	163	61	8.30	84	215	40.80	31.30
24	Crawford .....	20	1	95	95	8	7.30	83	96	33.40	29.32
25	Dallas .....	13	29	113	137	27	6.74	115	174	35.10	30.60
26	Davis.....	6	65	35	99	10	6.60	99	89	29.51	22.19
27	Decatur .....	9	51	59	104	12	7.00	86	112	29.27	21.47
28	Delaware .....	14	22	98	112	30	7.36	79	166	35.66	25.13
29	Des Moines....	6	59	27	87	72	8.55	77	144	50.31	33.59
30	Dickinson .....	11	3	22	33	.....	6.50	21	26	27.55	25.17
31	Dubuque .....	10	50	60	115	74	8.50	65	172	46.46	29.41
32	Emmet .....	8	1	22	23	2	6.20	18	24	30.64	24.58
33	Fayette.....	12	78	95	164	27	7.02	96	247	30.98	23.01
34	Floyd .....	12	14	93	103	27	7.47	56	153	34.59	25.94
35	Franklin .....	10	30	58	90	6	7.30	48	122	34.98	27.98
36	Fremont.....	11	16	95	105	22	7.64	90	103	37.25	31.89
37	Greene .....	14	11	103	108	10	6.93	71	137	29.70	27.33
38	Grundy.....	12	20	113	131	2	7.00	63	104	31.32	27.74
39	Guthrie.....	14	18	106	120	17	6.50	85	123	31.94	30.70
40	Hamilton.....	12	16	70	91	13	7.44	58	113	29.80	26.28
41	Hancock .....	7	.....	49	45	2	6.90	20	58	34.67	29.17
42	Hardin .....	9	58	64	116	30	7.26	87	171	34.64	27.64
43	Harrison .....	15	34	79	111	16	7.69	107	141	37.96	26.75
44	Henry .....	4	73	33	99	26	7.81	72	168	35.07	25.93
45	Howard .....	11	10	70	76	13	7.28	50	111	34.36	25.40
46	Humboldt .....	10	9	51	63	.....	6.33	28	88	27.00	24.10
47	Ida.....	10	1	25	32	4	6.02	18	34	36.48	31.23
48	Iowa .....	10	31	77	137	20	7.70	111	176	31.60	26.55
49	Jackson .....	13	41	96	136	30	7.50	99	169	34.79	23.52
50	Jasper.....	17	28	148	167	38	7.57	138	251	33.89	28.50

## REPORTS FOR 1878.

## STATISTICS.

SCHOLARS.					SCHOOL-HOUSES.				Value.	Value of apparatus.	No. of volumes in library.	
Between the ages of 5 and 21 years.		Enrolled in public sch'ls.	Total average attendance.	Av. cost of tuition per mo. per pupil.	Number.							
Males.	Fem'ls.				Frame.	Brick.	Stone.	Log.				
2162	1839	3113	1746	\$ 2.23	120	.....	.....	...	\$ 61,150	\$ 762	71	1
2084	1906	3459	1822	1.74	89	1	....	...	40,030	1,215	35	2
4241	4047	6675	3306	1.27	93	1	5	21	73,866	2,293	3	3
3461	3121	5520	3391	1.21	118	1	....	2	78,800	2,341	210	4
868	807	1383	620	3.28	55	.....	....	...	28,165	2,775	2	5
4745	4559	7520	4489	1.44	183	3	1	...	129,498	2,508	88	6
4502	4276	6734	4340	1.33	127	10	10	...	163,635	4,342	130	7
3843	3567	5812	3392	1.47	126	11	....	...	98,735	762	34	8
2871	2649	4158	2446	1.32	88	10	6	1	80,530	2,479	36	9
3591	3414	5395	3274	1.34	135	5	2	...	131,175	1,798	171	10
1068	954	1534	865	2.99	69	2	....	...	42,575	1,145	712	11
2667	2415	3974	2435	1.68	122	2	1	...	82,055	1,870	829	12
851	796	1395	721	3.00	62	1	....	...	26,935	1,742	77	13
1708	1573	2445	1277	2.63	93	.....	....	...	43,617	4,485	.....	14
2843	2784	4329	2462	1.98	130	2	....	...	91,740	3,195	402	15
3557	3417	5887	3592	1.65	133	5	1	...	111,210	2,090	447	16
1818	1731	2991	1743	2.02	86	.....	11	...	76,220	673	83	17
1138	1126	1755	1004	2.76	79	.....	....	...	43,588	2,060	21	18
2845	2668	4171	2501	1.41	101	1	1	2	52,067	1,654	53	19
2186	2117	3260	2127	1.39	75	18	....	...	63,135	295	.....	20
572	550	817	517	2.57	61	.....	....	...	22,235	1,152	142	21
5583	5483	7828	4379	1.53	110	29	18	9	152,569	3,135	319	22
6827	6587	9964	6329	1.33	160	10	1	...	214,069	2,348	184	23
1785	1580	2498	1486	2.49	93	6	....	...	52,915	4,027	1180	24
3376	3114	5434	3414	1.76	142	4	....	...	124,975	2,804	125	25
3137	3106	4995	2939	1.03	93	3	....	5	75,124	589	2	26
2896	2760	4232	2576	1.27	75	26	1	2	70,186	606	132	27
3119	3066	4850	2957	1.52	102	15	5	...	104,815	1,908	451	28
6142	6188	7065	4174	1.70	60	19	17	...	192,135	5,775	207	29
378	349	482	281	2.64	37	.....	....	...	19,705	344	30	30
8680	9355	9335	5484	1.37	79	17	23	9	243,160	4,955	761	31
352	266	454	249	2.93	24	.....	....	...	16,080	1,555	157	32
4608	4225	6318	3777	1.35	147	15	9	...	104,101	2,255	316	33
2862	2737	4476	2576	1.56	95	3	11	...	105,191	1,517	55	34
1729	1585	2509	1434	2.25	82	3	5	...	68,410	1,296	25	35
2954	2908	4805	2759	1.67	106	7	....	...	101,800	313	.....	36
2020	1885	3003	1695	2.31	107	2	....	...	71,555	834	267	37
2118	1910	3004	1639	2.45	123	.....	....	...	58,555	1,550	96	38
2328	2135	3658	2395	1.86	118	5	....	...	77,090	1,135	207	39
1828	1714	2935	1637	1.88	93	1	1	...	43,515	405	18	40
483	430	749	373	3.93	42	2	....	...	15,850	878	291	41
3495	3392	4844	3099	1.59	120	7	1	...	111,420	1,662	21	42
2797	2637	4307	2710	1.80	110	2	....	...	92,515	2,500	192	43
4123	3975	6160	3636	1.14	84	25	1	...	123,127	759	54	44
2139	1806	2982	1696	1.59	74	2	3	...	47,157	1,540	200	45
788	757	1149	723	2.24	59	1	2	...	32,038	1,755	.....	46
504	432	800	454	2.61	31	.....	....	...	15,080	710	500	47
3678	3461	5532	3743	1.39	125	13	....	...	89,255	3,250	758	48
4606	4344	6784	3958	1.33	105	11	24	6	132,343	232	69	49
5225	4876	7651	4754	1.39	149	4	....	...	163,455	2,062	108	50

## REPORTS OF COUNTY SUPERINTENDENTS.

## ABSTRACT [A]—CONTINUED.

## SCHOOL

COUNTY.	DISTRICTS.			SCHOOLS.			TEACHERS.			
	District Townships.	Independent Districts.	Sub-districts.	Ungraded.	Rooms in graded.	Av. duration, months.	Numb'r employed.		A v. monthly compensation.	
							Males.	Females.	Males.	Females.
51 Jefferson.....	9	27	68	92	18	7.20	85	124	\$34.57	\$24.10
52 Johnson.. .....	15	48	115	163	22	7.45	90	251	32.20	27.00
53 Jones..... .....	14	61	66	128	24	7.30	89	191	33.14	23.76
54 Keokuk .....	2	118	24	131	27	7.00	131	141	31.40	25.34
55 Kossuth.....	8	1	68	81	4	7.20	60	70	28.30	25.74
56 Lee. .... .....	8	66	48	110	77	7.41	88	185	42.65	29.86
57 Linn.....	12	62	119	179	55	7.70	135	277	32.75	27.00
58 Louisa.....	9	28	53	73	25	7.71	55	111	38.67	28.10
59 Lucas .....	4	64	31	88	13	7.06	65	116	32.70	26.17
60 Lyon .....	8	3	25	30	2	6.60	14	33	37.00	31.23
61 Madison .....	12	23	107	125	18	7.00	106	150	32.30	30.00
62 Mahaska .....	8	74	62	134	42	7.50	106	195	33.00	29.12
63 Marion .....	4	112	24	140	31	6.89	145	134	30.89	20.00
64 Marshall.....	12	53	89	134	32	7.46	133	159	37.25	36.36
65 Mills.....	4	57	21	76	19	7.70	63	108	38.00	32.25
66 Mitchell .....	8	46	50	88	21	7.00	69	127	34.93	25.30
67 Monona .....	17	1	78	84	5	7.44	61	77	33.46	30.18
68 Monroe .....	8	33	61	91	10	6.62	62	113	29.84	25.59
69 Montgomery...	10	21	80	92	16	6.84	64	111	33.49	27.67
70 Muscatine.....	10	29	67	90	39	8.47	74	121	40.04	31.60
71 O'Brien .....	9	1	50	48	.....	6.45	26	46	31.59	28.29
72 Osceola .....	8	2	30	33	2	5.57	17	39	27.82	24.85
73 Page .....	11	45	80	117	23	7.23	94	155	35.91	30.75
74 Palo Alto.....	14	1	58	58	2	6.71	27	66	31.62	27.52
75 Plymouth .....	17	1	82	84	5	7.50	65	85	35.04	31.20
76 Pocahontas.....	13	8	44	63	.....	6.50	28	67	28.39	26.66
77 Polk.....	11	55	90	138	75	7.62	116	218	41.00	34.89
78 Pottawattamie	25	3	179	172	29	7.70	132	195	36.79	34.05
79 Poweshiek.....	14	24	117	132	27	8.10	127	193	33.91	29.02
80 Ringgold .....	12	31	87	115	4	6.28	79	133	29.24	26.43
81 Sac.....	16	1	77	76	5	6.43	46	88	28.44	27.40
82 Scott .....	13	25	78	103	95	9.14	110	165	50.07	44.00
83 Shelby .....	16	2	93	97	5	6.66	81	98	32.45	30.03
84 Sioux .....	12	1	59	64	....	7.23	50	53	30.90	28.87
85 Story .....	14	22	108	119	14	7.28	104	135	30.50	25.91
86 Tama.....	12	77	92	159	28	7.36	120	202	34.10	28.37
87 Taylor.....	14	20	103	117	14	7.06	93	119	32.40	28.96
88 Union .....	10	20	89	93	21	7.30	74	139	31.30	28.31
89 Van Buren ....	8	45	65	102	24	6.95	82	141	32.89	22.88
90 Wapello .....	7	49	50	88	49	7.53	95	124	37.76	29.09
91 Warren.....	6	95	40	126	27	6.58	114	158	32.58	26.11
92 Washington ...	6	83	48	124	27	7.00	87	184	33.00	24.50
93 Wayne.....	13	29	79	106	14	7.12	95	104	33.68	24.05
94 Webster .....	18	24	88	116	14	7.29	76	159	28.00	25.69
95 Winnebago ....	3	1	26	28	6	6.50	23	31	29.36	24.57
96 Winneshiek ...	15	38	96	129	25	7.05	90	153	36.40	25.32
97 Woodbury .....	15	22	68	93	22	7.45	60	117	39.70	33.13
98 Worth.....	12	1	61	63	3	6.30	26	88	30.98	25.44
99 Wright.. .....	11	1	56	63	.....	7.00	46	69	33.25	20.15
Totals.....	1119	3117	7266	10218	2008	7.31	7561	13023	33.98	27.84

## REPORTS FOR 1878.

## STATISTICS.

SCHOLARS.					SCHOOL-HOUSES.				Value.	Value of appa- ratus.	No. of volumes in library.	
Between the ages of 5 and 21 years.		Enrolled in public sch'ls.	Total average attendance.	Av. cost of tu- ition per mo. per pupil.	Number.							
Males.	Fem'ls.				Frame.	Brick.	Stone.	Log.				
3245	3231	4893	2350	\$ 1.24	91	4	.....	...	\$ 94,857	\$ 1,173	204	51
5092	5011	7144	4087	1.52	148	16	3	...	135,990	1,512	63	52
4413	4205	6279	3972	1.12	119	7	4	3	110,105	1,790	74	53
4165	3920	6040	3778	1.22	129	7	3	...	101,443	927	29	54
1136	1147	1724	986	2.07	71	.....	.....	...	41,200	1,649	1000	55
6913	6940	9034	4904	1.53	73	34	13	4	247,586	1,376	117	56
6613	6644	9886	6120	1.16	164	26	2	...	214,170	1,208	442	57
2452	2409	3930	2324	1.43	78	1	1	...	57,975	991	23	58
2520	2459	3884	2349	1.35	89	2	.....	...	63,385	487	4	59
316	271	435	245	5.46	33	.....	.....	...	26,715	745	.....	60
3543	3189	5609	3407	1.41	98	10	22	...	107,055	1,323	198	61
4849	4525	7073	4518	1.31	128	13	.....	...	198,690	1,568	33	62
5321	5155	8301	4582	1.00	131	11	.....	1	130,167	1,102	3	63
4265	3992	6266	4029	1.82	129	15	.....	...	124,890	2,919	590	64
2530	2326	3322	2035	1.74	74	6	.....	..	76,441	1,009	6	65
2510	2371	3726	2090	1.64	80	8	5	2	81,665	1,787	35	66
1473	1380	2231	1256	2.30	80	2	.....	...	56,083	2,230	1130	67
2565	2426	4027	2363	1.34	91	2	.....	1	70,486	919	1	68
2527	2197	3556	2119	1.64	90	3	1	...	78,562	602	21	69
4212	4023	5623	3771	1.38	86	12	.....	...	149,700	1,065	103	70
528	497	801	474	3.21	39	6	.....	...	22,358	218	.....	71
341	348	487	342	2.93	37	.....	.....	...	7,750	32	2	72
3291	2917	4801	2987	1.59	119	2	.....	...	112,598	1,904	394	73
727	677	1144	612	3.00	58	.....	.....	...	27,368	1,240	430	74
1327	1242	1836	1089	2.82	78	1	.....	...	54,162	1,701	19	75
614	573	1054	447	3.56	59	1	1	...	27,520	7,658	.....	76
6827	6711	9677	6084	1.61	136	13	.....	...	292,504	2,433	220	77
5100	4783	6483	3867	2.15	152	25	.....	1	191,135	3,476	1171	78
3722	3389	5212	3220	1.67	139	.....	.....	...	99,200	1,191	140	79
2216	1975	3363	2131	1.64	115	1	.....	...	49,048	797	2	80
1109	1112	1610	996	2.32	70	4	.....	...	44,681	819	7	81
7820	7699	9501	6050	1.79	102	10	7	...	413,525	3,892	413	82
1835	1630	2773	1514	2.27	82	1	.....	...	45,514	2,395	96	83
915	775	1136	741	3.00	65	....	.....	...	26,038	2,302	731	84
2971	2842	4679	2683	1.54	118	8	....	...	88,250	1,011	119	85
3834	3545	6067	3618	1.73	163	6	2	...	139,538	1,884	89	86
2862	2796	4320	2621	1.61	121	1	1	...	81,840	1,625	121	87
2347	2333	4094	2353	1.84	103	3	.....	...	82,985	761	.....	88
3365	3216	5138	3166	1.09	88	18	1	1	106,750	216	2	89
4319	4237	6312	3740	1.43	84	14	1	...	162,763	1,128	292	90
4004	3650	6115	3598	1.29	134	3	.....	...	96,015	1,040	279	91
4025	3970	6044	3989	1.14	126	7	.....	...	102,265	1,835	32	92
3083	2882	4625	3217	1.10	105	2	.....	...	62,199	985	1	93
3003	2685	4048	2184	1.85	116	3	.....	..	105,159	2,255	523	94
784	712	913	565	1.63	27	1	.....	1	27,675	1,251	21	95
4911	4520	6186	3565	1.42	93	26	16	3	119,380	3,498	66	96
1887	1910	2928	1998	2.65	86	7	....	1	86,360	3,770	125	97
1236	1198	1707	833	2.36	54	1	1	1	28,385	667	4	98
870	736	1195	748	2.79	55	2	.....	...	25,920	1,160	941	99
294714	280760	428362	256913	1.60	9596	650	244	76	9,161,701	173,841	20587	

## ABSTRACT [B]

## SCHOOL

COUNTY.	SCHOOL-HOUSE FUND.									CONTINGENT FUND. On hand at last report.
	DEBIT.				CREDIT.					
	On hand at last report.	Received fr'm district tax.	Received fr'm other sources.	Total debit.	Paid for sch'l houses and sites.	Paid for libraries and apparatus.	Paid on bonds and interest.	On hand.	Total credit.	
Adair.....	8089 19	9284 78	1012 02	18385 99	18263 07	27 00	1934 80	8161 62	18385 99	3193 81
Adams....	8623 12	10823 12	1170 79	15617 03	6986 94	308 08	3060 88	5311 13	15617 03	3041 75
Allam'ee	2722 06	2545 47	184 52	5152 05	1440 74	115 63	1005 98	2889 70	5452 05	5060 96
Appan'se	1451 80	5386 66	272 84	7111 30	3597 54	188 45	2107 99	1217 32	7111 30	8251 60
Audubon	2099 25	5641 82	2396 96	10188 03	8891 78	154 00	20 45	1571 80	10188 03	1970 89
Benton...	4468 83	6074 46	784 61	11327 40	2435 63	17 00	3164 49	5710 28	11327 40	6490 86
Bl'k Ha'k	8007 94	11846 35	1166 02	21020 31	4250 03	230 48	8402 48	8137 32	21020 31	7770 59
Boone....	5265 69	7363 28	2698 89	15327 86	9165 82	932 13	464 18	4765 73	15327 86	5658 97
Bremer...	3684 19	4926 32	428 22	9038 73	1920 15	369 56	3529 80	3219 16	9038 73	4235 59
Bucha'an	3781 54	6814 52	3686 84	14282 90	2498 79	44 50	6558 51	5181 10	14282 90	4132 96
Buena V.	6365 10	7531 14	954 43	14850 67	318 90	444 41	7161 61	8125 75	14850 67	1754 72
Butler....	7175 56	8518 68	621 25	16315 49	8391 48	233 11	1313 92	6376 98	16315 49	6065 27
Calhoun..	4953 89	2308 20	1746 94	9503 53	6432 00	345 00	.....	2726 03	9503 53	2655 81
Carroll....	5386 40	10138 66	586 86	16111 92	8155 15	834 35	1418 26	5704 16	16111 92	2508 18
Cass.....	4106 92	10186 85	683 88	14977 60	7771 89	248 06	1631 65	5326 00	14977 60	6625 45
Cedar.....	4774 78	7781 25	581 08	13137 11	7063 57	.....	4393 75	1679 79	13137 11	7553 85
Cr. Gordo	5166 57	8423 03	17320 58	30910 18	9296 24	453 37	18074 32	3088 25	30910 18	5394 05
Cherok'e	4427 75	9580 90	813 77	14822 42	7390 21	25 39	2059 74	5347 09	14822 42	1683 27
Chick'aw	4177 90	6307 31	865 13	11350 34	4296 68	166 27	2301 14	4586 25	11350 34	2807 45
Clarke....	3579 77	5153 77	567 21	9300 75	4998 97	21 15	1295 32	2985 31	9300 75	2501 06
Clay.....	1602 42	8588 56	748 77	5889 75	3864 97	15 30	292 51	1716 97	5889 75	1339 87
Clayton..	10498 61	4273 42	18945 13	28717 22	12241 00	1777 65	416 66	14241 91	28717 22	6668 44
Clinton...	6235 29	15525 00	1297 78	2358 07	5245 47	106 00	8856 11	8850 49	23058 07	7078 46
Crawford	6486 40	10439 17	668 40	17593 97	10522 55	183 86	2748 68	4188 88	17593 97	3297 76
Dallas....	4276 91	13875 79	1291 54	19444 29	7062 49	644 86	5356 26	6380 68	19444 29	5744 64
Davis....	1722 48	2954 92	251 67	4929 07	3092 41	20 84	235 13	1590 69	4929 07	2118 75
Decatur...	3257 23	6611 63	1579 85	11448 71	6913 83	182 12	1766 54	2586 22	11448 71	3144 42
Delaware	2362 83	7710 59	1028 52	11601 44	6104 07	44 50	3887 80	1565 07	11601 44	5171 87
Des M'es*	4903 33	5527 39	206 80	10642 52	7916 80	122 74	871 13	1731 85	10642 52	8747 42
Dickin'n.	1553 46	2282 28	1181 10	5016 84	2913 90	72 57	452 49	1577 88	5016 84	540 59
Dubuque	3010 45	3939 79	730 63	7680 87	3010 59	887 21	907 64	2875 43	7680 87	8497 78
Emmet....	2057 47	1469 79	78 77	3606 03	724 79	242 65	400 16	2288 43	3606 03	678 97
Fayette...	6102 13	9631 42	715 52	16449 07	9254 41	20 63	2167 34	5006 69	16449 07	4426 28
Floyd .....	854 12	7463 46	2597 80	10415 38	5939 08	539 75	3644 83	291 72	10415 38	1913 67
Franklin	4906 51	8845 92	1056 59	14809 02	6528 77	43 55	5284 17	2954 53	14809 02	2719 65
Fremont.	3574 93	13120 45	869 02	17564 40	6416 00	223 43	5848 65	5076 32	17564 40	6323 28
Greene....	3150 53	9927 66	295 72	13373 91	7363 86	124 65	1313 83	4572 07	13373 91	1618 04
Grundy...	2675 04	4195 67	410 54	7281 25	4316 93	198 37	387 42	2383 53	7281 25	5163 24
Guthrie..	10549 84	6381 03	824 02	17754 89	10931 91	376 64	975 00	5171 34	17754 89	3222 07
Hamilt'n	2322 46	8814 02	261 93	11898 41	5790 99	261 00	808 83	5039 59	11898 41	3373 40
Hancock	2062 30	4087 24	904 23	7053 77	3267 78	178 88	.....	3607 11	7053 77	1170 99
Hardin ...	13917 83	9174 94	12166 08	35258 85	21021 47	191 33	2414 55	11631 44	35258 85	3747 20
Harrison	6137 07	7648 83	1461 15	15247 05	3725 62	521 63	4628 85	6370 95	15247 05	8241 17
Henry ...	1520 50	3696 70	1552 21	6769 41	4979 03	49 59	319 75	1421 04	6769 41	5910 12
Howard..	3103 62	4824 86	3541 23	11469 71	3022 78	178 48	3940 44	4328 01	11469 71	791 77
Humbolt	2299 92	3215 45	636 99	6152 36	3104 61	20 00	1401 09	1626 66	6152 36	2150 78
Ida.....	2310 49	5435 40	1313 93	9059 82	6457 13	354 20	73 58	2174 91	9059 82	1222 65
Iowa.....	3367 64	6990 05	1280 60	11638 29	5945 56	82 00	8402 32	2258 41	11638 29	5918 61
Jackson ..	2492 11	7915 80	972 12	11380 03	2397 57	26 16	6357 23	2099 07	11380 03	3026 28
Jasper .....	6380 34	10293 53	20738 43	37412 30	7799 11	43 00	20541 12	9029 07	37412 30	6541 87
Jefferson	1619 65	5109 80	97 71	6927 16	1587 19	33 33	3262 57	1944 07	6927 16	2068 20
Johnson .	4157 77	5456 92	5148 66	14763 35	10001 57	.....	1484 28	3297 50	14763 35	1713 62
Jones .....	6599 75	6534 32	7433 50	20567 57	14503 81	31 68	4745 53	1286 55	20567 57	3081 85

\*Loss by defalcation of treasurer, Burlington—School-House Fund, \$3763 40; Contingent Fund, \$10710 21; Teachers' Fund, \$15387 07.



REPORTS FOR 1878.

FINANCES.

CONTINGENT FUND.

DEBIT.		Total debit and credit.	CREDIT.								On hand.	
R'celv'd from district tax.	R'celv'd from other sources.		Paid for rent and repairs sch. houses.	Paid for fuel.	Paid secretaries and treasurers.	Paid for records, dictionaries and apparatus.	Paid for insurance.	Paid janitors.	Paid for other purposes.			
8990 90	198 63	12882 84	866 89	2955 75	899	218 97	819 15	153 63	2744 75	4224 70	1	
6947 14	208 71	10197 60	2007 41	1888 85	963	255 79	819 58	338 25	1118 80	8211 42	2	
6772 30	269 16	12182 41	1514 20	1862 79	1003	405 89	125 78	451 69	1839 85	4899 71	3	
6317 25	108 28	9677 11	1539 60	1893 48	548	187 93	97 62	351 54	1823 15	4241 81	4	
4283 31	369 70	6623 90	444 60	1207 75	761	303 07	81 45	59 50	1781 17	2085 86	5	
16669 30	1136 39	24296 05	3067 81	4165 66	1538	926 59	463 18	1092 97	5489 97	7551 87	6	
15177 90	181 64	23080 13	2560 10	4569 48	1330	518 95	824 30	1377 74	5916 8	6488 08	7	
11524 79	303 92	17487 68	2988 40	2458 85	1023	1077 41	818 07	532 85	2718 87	6870 23	8	
7830 58	781 56	12847 78	2145 02	2367 55	829	522 34	244 02	507 64	2544 18	3687 98	9	
11189 76	568 58	15841 28	3480 57	2633 75	924	136 90	494 67	913 34	2017 79	5206 26	10	
6794 03	367 28	8915 01	892 72	1819 87	857	241 38	267 84	325 10	1509 75	8001 85	11	
11293 83	1247 18	18606 33	2418 18	2740 51	1513	726 32	279 32	740 04	3776 35	6412 61	12	
4967 33	960 88	8584 02	302 46	1097 32	941	183 54	66 40	.....	2455 84	3587 46	13	
9160 42	100 57	11769 62	1223 92	1786 39	1190	343 80	271 25	222 37	2410 20	4301 69	14	
11113 97	564 02	18303 44	2073 14	3235 47	1230	192 45	681 88	544 66	4126 15	6219 69	15	
12890 94	780 78	21225 57	3083 15	3763 70	1333	401 73	481 37	691 07	3561 67	7919 88	16	
9011 12	921 97	15327 14	1360 82	1892 59	597	296 96	254 75	308 14	4624 05	5992 83	17	
6801 64	851 46	8835 37	959 05	1580 15	1152	210 90	213 48	824 10	1901 79	2498 95	18	
8634 55	1092 19	12184 19	2274 64	1653 05	1018	577 84	170 14	415 40	3096 68	3123 44	19	
6886 21	800 41	10187 67	1822 92	1484 91	943	181 70	46 70	444 65	1915 83	3447 96	20	
4919 78	378 44	6688 09	265 95	1223 13	464	5 00	188 00	113 04	2204 82	2224 15	21	
11842 78	2002 74	20018 95	1770 40	2873 08	1505	1064 89	441 95	651 77	4685 02	7021 84	22	
19492 83	1052 79	27628 58	4374 28	3669 63	1570	187 69	450 15	2479 84	3814 69	11077 82	23	
11098 60	183 82	14532 18	1643 50	2770 27	1088	389 61	526 88	369 93	2861 89	4877 44	24	
14002 53	642 82	20391 04	3278 12	2669 16	1225	296 71	539 92	523 32	3784 66	8078 15	25	
4652 76	285 76	7057 27	822 16	1517 77	730	206 15	150 79	289 77	1412 03	1928 60	26	
6408 99	554 52	10507 93	1222 94	1437 29	613	206 49	180 48	149 98	2157 78	4539 49	27	
10399 16	457 23	16028 26	3646 82	2790 88	1121	107 50	226 50	691 44	2230 68	5210 44	28	
11419 11	1624 65	21825 18	1987 61	3546 33	1094	855 96	528 87	3196 76	5292 87	5072 78	29	
2191 89	82 83	2815 31	222 38	658 51	579	90 57	58 80	16 75	277 83	911 47	30	
19031 75	699 54	28279 07	4996 04	3553 84	3068	279 95	881 93	3403 50	6729 71	5364 60	31	
1937 29	54 18	2665 44	281 20	877 17	855	49 65	92 40	94 87	437 76	974 89	32	
9913 42	535 21	14874 86	2208 22	2366 93	1020	607 83	210 01	324 69	3998 31	5043 87	33	
12078 67	67 45	13999 79	2723 11	3382 92	785	721 09	65 00	500 80	2665 81	3146 07	34	
9329 91	793 42	12848 98	1749 44	2441 41	909	295 34	254 54	298 05	4175 04	2726 16	35	
10336 2	246 14	16906 84	2591 71	2572 63	820	203 50	702 78	491 10	2076 48	7449 09	36	
9173 10	483 13	11276 27	2034 97	1634 77	1205	230 63	538 33	261 14	2217 50	3113 93	37	
7303 83	177 70	12946 87	2188 44	2794 55	810	78 10	11 00	19 00	2069 94	4875 82	38	
10795 28	1319 22	15336 57	2070 36	2391 69	1080	367 84	40 75	440 90	3728 83	5216 20	39	
8075 89	1197 80	12647 09	1832 33	1307 51	780	239 60	875 52	37 43	2874 80	5149 85	40	
4011 73	648 16	5955 88	874 32	1439 78	460	267 95	87 50	161 92	395 86	2218 60	41	
11530 37	1172 58	16450 15	1739 57	2833 06	1263	434 43	453 66	783 05	3176 63	5361 69	42	
10389 35	1683 85	20799 37	2350 89	2550 41	1056	789 37	570 51	843 16	3822 45	8321 59	43	
8743 24	691 55	15339 91	1850 95	2720 74	863	236 88	256 76	1448 63	1587 91	6370 04	44	
7850 81	346 01	9028 62	1226 65	1647 89	457	83 80	237 99	109 85	3167 89	2147 55	45	
4747 31	28 09	6836 17	791 79	1441 92	516	257 06	204 50	84 50	819 79	2770 61	46	
2256 98	292 04	3771 67	265 91	499 42	425	109 87	.....	.....	900 19	1591 23	47	
10450 14	434 12	20762 87	3596 88	3226 59	1184	489 08	203 60	691 70	4632 10	6759 92	48	
10353 62	1051 43	14484 43	2535 72	2342 23	1322	223 52	661 85	506 25	1911 56	4441 81	49	
12946 86	1033 03	20533 79	5029 46	3334 51	1349	980 66	403 93	1059 96	2389 52	5936 75	50	
6041 91	31 23	8140 89	539 83	1549 18	535	84 70	75 58	1 77	1711 99	3549 36	51	
14396 85	2701 28	26111 75	2305 70	4186 39	1251	389 84	140 40	1025 00	5214 83	11649 04	52	
12390 47	2824 55	18296 87	4270 94	2569 15	945	2564 82	295 85	771 05	4509 98	2370 10	53	

## ABSTRACT [B]—CONTINUED.

## SCHOOL

COUNTY.	SCHOOL-HOUSE FUND.									CONTINGENT FUND. On hand at last report.
	DEBIT.				CREDIT.					
	On hand at last report.	Received fr'm district tax.	Received fr'm other sources.	Total debit.	Paid for sch'l houses and sites.	Paid for libraries and apparatus.	Paid on bonds and interest.	On hand.	Total credit.	
Keokuk..	4465 50	4245 60	1489 22	10200 32	2090 00	1 95	3203 08	4905 29	10200 32	6159 20
Kossuth..	2472 90	7568 00	924 25	10965 15	3605 28	640 00	1663 92	5055 97	10965 15	2766 70
Lee.....	1754 01	6305 78	1389 52	9449 31	8187 38	322 32	1305 29	4634 32	9449 31	2706 28
Linn.....	1189 13	16507 51	21391 07	39087 71	14741 18	21 00	17749 62	6575 91	36087 71	5159 67
Louisa....	3690 69	8241 64	10236 10	17162 43	10074 84	47 10	990 45	6050 54	17162 43	3113 88
Lucas.....	3000 59	3899 96	17183 11	24083 66	15472 91	69 98	2175 01	6355 76	24083 66	2194 94
Lyon .....	737 23	5608 61	2405 17	8751 01	5659 24	82 00	2764 90	244 87	8751 01	118 55
Madison..	3110 18	9129 84	8826 45	21066 47	16166 61	241 15	1040 98	3617 73	21066 47	4663 95
Mahaska..	6210 52	13593 13	1779 26	21582 91	7348 75	1538 92	7094 18	5601 11	21582 91	4183 66
Marion...	12784 18	8846 67	1418 34	23049 19	16177 13	474 72	2518 76	3878 58	23049 19	4566 87
Marshall..	5150 40	13631 48	1162 41	19944 29	7997 49	49 35	5848 71	6248 74	19944 29	6629 65
Mills .....	3024 93	7625 70	977 72	11628 35	2107 76	203 21	5700 05	3617 33	11628 35	3055 50
Mitchell..	4062 27	8594 25	1705 09	14361 61	4864 16	68 74	4992 34	4436 37	14361 61	1970 82
Monona..	4459 63	3633 01	783 66	8931 35	4107 15	609 04	923 24	3291 92	8931 35	3106 76
Monroe...	3427 39	7300 97	147 76	10876 12	2146 45	995 80	6555 02	1178 85	10876 12	2249 28
Montg'ry..	2651 98	11070 54	1903 28	15630 80	5963 75	763 54	5788 53	3114 98	15630 80	3863 33
Muscatine	2114 58	5995 84	1517 39	9427 81	3933 96	73 87	4169 90	1250 08	9427 81	2196 94
O'Brien ..	612 32	3402 97	.....	4015 29	1117 39	156 05	1513 10	1228 75	4015 29	566 34
Osceola...	889 43	1889 25	209 91	2988 59	1740 46	99 50	231 49	914 14	2988 59	915 14
Page .....	17676 02	11596 02	817 19	30089 23	20811 23	150 85	3465 74	5661 41	30089 23	8880 35
Palo Alto..	1823 29	3349 34	123 50	5746 17	3488 16	500 08	100 00	1707 93	5746 17	1282 88
Plymo'th..	3462 14	6137 41	1700 03	11699 58	5338 24	315 45	2243 29	3302 60	11699 58	4426 26
Pocah'ns..	2196 09	2624 70	70 00	4890 79	2575 88	.....	112 00	2202 91	4890 79	1799 92
Polk .....	7413 51	30437 56	81036 35	11887 42	21736 59	580 39	89348 79	7221 65	11887 42	9461 82
Pottaw'ie..	9890 90	19605 57	9576 94	39073 41	18554 77	372 02	14065 73	6080 89	39073 41	12929 08
Powsh'lk..	3035 01	7653 68	152 48	10841 17	7237 85	.....	761 68	2841 64	10841 17	7361 06
Ringgold..	3460 40	5462 23	825 27	9747 90	5025 19	25 00	1554 37	3143 34	9747 90	2960 20
Sac.....	2948 98	7699 62	1101 00	11749 60	5724 76	261 78	1684 61	4078 50	11749 60	2137 34
Scott.....	3207 14	8893 04	8792 72	20892 90	15438 28	453 15	1746 49	3254 98	20892 90	20313 56
Shelby...	5304 58	8095 42	1404 86	14804 86	10022 22	789 65	420 81	3572 18	14804 86	2826 40
Sioux.....	3902 76	3943 07	587 99	8433 82	4739 81	884 78	945 83	1863 45	8433 82	2581 58
Story .....	5745 03	7399 70	833 71	14448 44	3932 36	1007 81	3216 27	6292 00	14448 44	4169 26
Tama .....	6336 88	5331 51	17002 26	28670 65	14202 18	276 06	2327 05	11865 41	28670 65	8434 50
Taylor....	1899 90	7014 01	1100 83	10014 24	6405 81	36 56	1370 59	2201 78	10014 24	3229 85
Union .....	4656 66	8750 28	3187 46	16594 40	7423 19	1205 67	3375 13	4589 81	16594 40	3036 22
V'nBur'n..	2559 35	5622 86	84 71	8216 42	5094 62	.....	2984 75	2137 05	8216 42	2722 30
Wapello..	3507 65	3451 39	4269 05	11228 09	1581 33	461 06	6581 14	2804 56	11228 09	2728 53
Warren ..	4505 90	7920 81	2464 92	14891 13	5941 72	579 13	4242 63	4127 60	14891 13	3465 25
Wash't'n..	3898 90	6424 11	1941 55	12264 56	3108 53	79 14	5327 72	3749 17	12264 56	4868 30
Wayne...	3195 01	7414 55	1042 50	11652 06	4599 05	1827 86	2766 71	2458 44	11652 06	6049 14
Webster..	7352 39	4790 80	3989 25	16332 44	6870 18	154 46	5227 88	4879 92	16332 44	5081 84
Win'b'go..	1316 88	3327 50	.....	4644 38	1228 61	.....	742 59	2673 18	4644 38	826 53
Win'sh'k..	4029 03	3392 93	666 44	18088 40	6281 30	841 27	1672 40	4293 43	18088 40	4318 80
Wood'by..	3599 10	9333 89	931 91	13914 90	3647 14	694 48	7114 81	2458 97	13914 90	5594 16
Worth.....	3346 97	5966 39	54 62	9367 89	4735 74	208 36	1667 93	2755 81	9367 89	1977 26
Wright...	1559 22	2002 33	357 47	3919 52	1349 46	405 49	692 12	1472 45	3919 52	2376 47
Total ...	429429.59	725844.29	345141.93	1491413.13	669627.14	31476.34	410659.10	389456.15	1491413.13	418478.99

REPORTS FOR 1878.

FINANCES.

CONTINGENT FUND.

DEBIT.		Total debit and credit.	CREDIT.							
Receiv'd from district tax.	Receiv'd from other sources.		Paid for rent and repairs sch. houses.	Paid for fuel.	Paid secretaries and treasurers.	Paid for records, dictionaries & apparatus.	Paid for insurance.	Paid janitors.	Paid for other purposes.	On hand.
7957 47	506 53	14623 20	1198 84	2849 67	1144	217 54	807 03	850 50	2969 87	6086 25
5505 60	349 67	8641 97	850 01	1540 66	489	167 10	82 00	6 84	2250 41	8256 41
18241 08	23584 80	44582 09	4821 95	3046 84	1807	69 97	884 24	2698 82	28548 00	8205 27
19796 48	1416 79	26872 94	4074 54	6085 54	1705	197 99	828 64	2057 60	4207 75	7220 88
5078 97	1282 76	9470 11	2036 52	1400 76	701	116 15	182 65	339 55	2082 97	2600 51
7378 22	3085 57	12658 73	1230 54	1452 36	859	488 30	168 65	395 64	4998 42	3115 82
2977 00	1015 87	4112 02	231 55	857 82	849	71 12	119 85	149 00	1677 86	155 82
10252 54	410 49	15326 98	1252 69	3099 15	977	167 57	369 47	624 55	2828 91	6507 74
15796 57	1453 58	21435 81	2202 57	3182 76	1095	346 83	248 10	256 03	8504 16	5655 86
10709 84	1305 62	16581 83	2876 78	2171 57	1207	159 83	463 17	695 80	2381 84	6625 54
15577 46	1847 58	24054 69	3470 34	4251 18	1178	227 48	268 74	855 22	4947 70	8858 03
9502 50	665 66	18228 66	1869 27	1508 30	896	179 75	149 50	169 28	1931 35	6100 21
8106 92	662 64	12740 88	1727 24	2400 96	674	182 68	845 10	302 25	2276 40	4831 75
6348 05	495 10	9949 91	1471 30	1445 97	466	767 92	259 33	352 25	1769 62	3417 52
4170 79	266 47	6726 54	687 49	1177 34	636	87 99	87 98	76 15	1765 99	2257 60
7680 82	599 78	12148 88	2165 40	2088 51	775	178 05	208 40	498 73	288 68	3621 11
18045 37	1227 77	21470 08	3348 15	2797 27	910	252 52	1190 39	925 45	7622 77	4428 53
4021 72	60	4588 66	508 51	762 42	485	27 55	248 50	33 13	1312 97	1210 58
1413 26	136 36	2464 76	340 94	303 68	240	24 32	19 29	4 00	444 08	1088 45
11433 39	663 92	20997 66	5118 48	2892 64	1267	512 22	528 48	601 53	2811 43	7265 88
5642 57	152 20	7277 65	1172 10	1697 11	725	43 00	194 06	8 00	999 86	2438 52
8158 29	3 80	12583 85	1084 60	2354 09	1166	307 03	329 45	300 10	1515 92	5526 16
3960 90	502 45	6283 27	392 35	1080 82	696	364 40	204 80	98 87	1197 39	2248 64
27329 39	4112 55	40903 76	7762 85	4821 55	2183	505 37	1025 55	3444 00	18830 52	7380 92
28150 21	1555 01	37634 25	5921 96	4124 77	2026	1899 98	846 10	3081 97	5184 42	14549 05
12642 96	2290 50	22294 52	3356 79	2962 54	1269	489 76	418 98	808 07	4546 51	8447 87
5276 69	1238 50	9475 39	1494 81	2373 89	667	158 37	340 95	124 00	1271 70	3044 67
5784 06	65 40	7966 80	976 29	1336 72	537	272 11	16 50	60 17	1657 22	3130 79
23788 41	1634 16	45766 03	5720 71	4903 80	2493	329 34	1546 11	4962 00	4742 53	21069 54
10072 05	218 81	12927 26	1077 11	1966 18	843	624 17	379 84	176 37	2420 52	5440 07
5529 17	49 89	8160 59	631 67	1610 18	936	536 63	170 43	58 00	1277 77	2839 71
12010 44	300 81	16480 51	1724 06	2588 26	1250	170 18	763 37	295 09	3595 99	6148 56
15491 41	1980 27	25906 18	5085 65	4730 77	1807	244 82	856 60	773 43	3960 13	8947 78
11410 18	1587 00	16226 98	8842 42	3004 40	889	578 19	511 16	354 40	4080 86	2867 05
11756 48	467 75	15280 45	2461 67	2061 16	817	418 58	400 95	1150 73	3772 98	4177 38
4543 06	962 18	8247 63	1470 96	1363 79	727	34 44	218 57	294 82	1645 11	2492 97
15882 46	4316 05	22937 01	2012 97	1863 91	964	571 62	406 78	420 90	9841 45	7355 41
8236 58	497 45	12599 28	1894 90	2226 89	1034	159 71	433 04	418 65	2485 75	4446 29
7354 59	881 54	13054 43	1288 11	2591 88	1020	91 48	249 10	664 15	2703 53	4447 73
2733 37	303 18	9705 69	794 55	1969 18	834	49 35	182 40	249 22	1963 44	3663 55
8972 26	433 44	14487 04	1435 10	2204 93	1291	483 59	756 21	568 34	2521 73	5226 14
3780 77	.....	4607 30	597 80	557 82	270	524 62	58 00	26 00	1071 17	1501 89
10467 64	1047 07	15833 01	2972 38	3233 05	894	583 35	573 19	570 83	1424 70	5581 51
12442 48	236 26	18274 90	2421 46	2081 41	1616	276 79	434 50	1160 00	3385 89	6398 85
4809 02	284 11	7070 39	577 92	967 51	588	378 72	20 00	103 58	1608 79	2825 87
5023 74	60 85	7460 56	646 50	1433 11	463	85 05	105 05	14 00	1460 37	3248 48
936754.36	106516.87	1475750.22	206198.01	230316.17	98907	25692.52	33366.26	63699.79	321930.53	486536.94

## ABSTRACT [B]—CONTINUED.

SCHOOL FINANCES, 1878.

COUNTY.	TEACHERS' FUND.							
	DEBIT.					CREDIT.		
	On hand at last report.	Receiv'd fr'm district tax.	Receiv'd from semi-annual apportionments.	Receiv'd from other sources.	Total debit.	Paid teachers since last report.	On hand.	Total credit.
Adair.....	11199 65	23352 13	3740 54	353 83	38646 15	26175 86	12470 29	38646 15
Adams.....	10633 55	19749 92	4550 97	465 38	35399 82	22391 99	13007 83	35399 82
Allamakee....	15219 54	16914 63	5086 03	3721 32	40944 52	20347 67	11096 85	40944 52
Appanoose....	10502 91	16450 44	6082 43	8183 05	36218 83	26325 98	9892 90	36218 83
Audubon.....	5536 69	10956 67	1889 81	883 61	19216 98	13216 88	6000 10	19216 98
Benton.....	25060 96	41404 41	11371 93	921 34	78758 64	47980 01	30778 63	78758 64
Black Hawk..	82158 91	88249 43	9803 61	1355 61	76562 56	44202 21	82380 35	76562 56
Boone.....	20632 69	27840 26	8404 65	763 68	57641 28	35517 52	22123 76	57641 28
Bremer.....	14774 10	19599 00	5365 64	951 36	40689 50	24863 45	16328 05	40689 50
Buchanan....	18217 59	23736 04	8655 48	1162 46	51771 57	33194 86	18576 71	51771 57
Buena Vista..	8636 16	14787 10	8053 03	888 45	27369 74	16740 67	10629 07	27369 74
Butler.....	21476 54	22118 04	6979 79	516 76	51091 13	30269 89	20821 74	51091 13
Calhoun.....	11186 65	8859 87	3184 07	1470 81	24700 90	14420 19	10280 71	24700 90
Carroll.....	7277 59	21520 90	3870 85	.....	32669 34	22596 06	10073 28	32669 34
Cass.....	24971 98	29239 67	6795 50	369 20	61376 35	37006 15	24370 20	61376 35
Cedar.....	30457 87	34218 87	9725 43	1432 81	75829 98	44437 13	31392 85	75829 98
Cerro Gordo	16561 82	22875 39	5576 35	935 44	45949 00	27193 75	18755 25	45949 00
Cherokee.....	7738 97	14864 48	3046 41	203 80	25853 66	18023 72	7829 94	25853 66
Chickasaw....	11199 53	23026 02	4257 75	372 31	38855 61	25201 88	13654 23	38855 61
Clarke.....	12017 70	11999 54	4853 05	563 48	29463 77	19628 28	9835 49	29463 77
Clay.....	7040 10	10814 83	1239 07	131 89	19225 39	8505 03	10720 36	19225 39
Clayton.....	32252 47	34418 82	10845 71	1105 31	78622 34	49236 75	29335 59	78622 34
Clinton.....	29399 42	52215 01	17262 09	1902 14	100778 66	69754 42	31024 24	100778 66
Crawford.....	14038 81	23853 79	2996 81	164 54	41053 95	26178 05	14875 90	41053 95
Dallas.....	13870 78	35451 89	8298 54	645 93	58267 14	40527 51	17739 63	58267 14
Davis.....	9734 95	12099 58	5782 23	75 00	27692 26	19921 05	7771 21	27692 26
Decatur.....	11831 47	17172 60	6102 85	1252 33	36358 75	22994 15	18364 60	36358 75
Delaware.....	18206 04	26215 46	7783 56	565 58	52775 64	33150 20	19625 44	52775 64
Des Moines..	25944 57	45017 13	10186 62	1272 64	82420 96	60862 38	21558 58	82420 96
Dickinson....	1959 35	4553 22	802 48	273 63	7583 68	4825 38	2763 30	7583 63
Dubuque.....	27946 69	43081 76	8447 95	939 23	80415 63	63948 65	16466 98	80415 63
Emmet.....	6158 73	2674 51	1962 81	5 86	10800 91	4525 48	6275 43	10800 91
Fayette.....	22819 45	24488 03	7255 81	1714 91	56278 20	35325 82	20952 38	56278 20
Floyd.....	12312 91	24744 29	6529 27	466 87	44633 34	30061 30	13992 04	44633 34
Franklin.....	7929 41	23338 92	3589 24	179 60	35037 17	23750 74	11286 43	35037 17
Fremont.....	18515 95	31889 81	6609 61	550 37	57545 74	35242 26	22303 48	57545 74
Greene.....	8243 84	22571 41	3588 94	554 57	34953 26	24372 85	10586 11	34953 26
Grundy.....	6316 89	27539 39	3825 33	118 40	37799 51	23147 29	9652 22	37799 51
Guthrie.....	9588 30	26578 48	5945 93	220 43	42333 14	28952 79	13380 35	42333 14
Hamilton.....	14078 12	22406 76	3895 30	89 99	40467 17	22934 94	17532 23	40467 17
Hancock.....	5548 21	8405 50	1934 98	1211 56	17100 25	10133 59	6986 66	17100 25
Hardin.....	25465 73	31237 13	6418 54	116 22	63237 62	35725 31	27512 31	63237 62
Harrison.....	27558 62	20014 83	9721 23	4254 24	61548 97	37699 02	23849 95	61548 97
Henry.....	21955 79	25011 26	9553 06	594 65	57114 76	32321 83	24792 93	57114 76
Howard.....	1622 63	19305 11	3195 41	1618 52	26536 67	19644 84	6891 83	26536 67
Humboldt.....	4959 30	8799 53	1442 30	216 81	15417 94	10293 26	5124 68	15417 94
Ida.....	4716 71	4446 71	1766 44	163 15	11093 00	6123 89	4964 11	11093 00
Iowa.....	18980 97	28275 14	7500 67	4743 71	59500 49	39538 35	19962 14	59500 49
Jackson.....	14609 27	29404 13	9794 74	1605 21	55404 35	39498 94	15905 41	55404 35
Jasper.....	20447 36	35055 88	14813 10	354 05	70670 39	50637 62	20032 77	70670 39
Jefferson.....	13149 63	17474 79	9099 49	615 20	40339 11	25595 49	14743 62	40339 11
Johnson.....	23228 86	28694 83	13215 58	3908 51	63747 78	46410 80	22336 96	63747 78
Jones.....	18637 70	24374 01	8952 93	1250 22	43214 86	32563 72	15651 14	43214 86

## ABSTRACT [B]—CONTINUED.

SCHOOL FINANCES, 1878.

COUNTY.	TEACHERS' FUND.							
	DEBIT.					CREDIT.		
	On hand at last report.	Received from district tax.	Received from semi-annual apportionments.	Received from other sources.	Total debit.	Paid teachers since last report.	On hand.	Total credit.
Keokuk .....	12956 11	22285 08	9687 84	1154 40	46032 91	82225 93	18806 98	46032 91
Kossuth .....	7896 34	14568 75	1470 50	2167 03	25601 62	14718 36	10888 26	25601 62
Lee .....	8410 52	38961 29	13817 00	4797 32	65486 13	55640 73	9845 40	65486 13
Linn .....	24182 56	42989 25	14544 91	1855 00	83521 72	57827 53	26194 19	83521 72
Louisa .....	14805 63	16561 14	6819 68	568 53	38254 98	25674 47	12580 51	38254 98
Lucas .....	14689 24	18775 14	5411 88	142 83	39019 09	22514 80	16504 29	39019 09
Lyon .....	959 66	6635 68	2452 82	1272 00	11814 16	8836 72	2477 44	11814 16
Madison .....	21284 91	22938 65	9827 70	302 06	54853 32	33565 48	20787 84	54853 32
Mahaska .....	18635 47	37953 99	11319 15	989 72	68898 33	44636 13	24262 20	68898 33
Marion .....	13621 49	26485 14	9943 08	620 19	50669 85	31764 07	18905 78	50669 85
Marshall .....	17614 14	46781 94	8291 93	6571 57	78259 58	55752 82	22506 76	78259 58
Mills .....	12333 18	21896 86	7020 45	1946 70	43287 19	27244 98	16042 21	43287 19
Mitchell .....	10471 08	19160 76	5967 96	1168 78	36668 58	24030 50	12638 08	36668 58
Monona .....	15855 18	20903 53	8711 30	302 19	40772 20	21548 49	19223 71	40772 20
Monroe .....	10594 92	13258 51	6664 69	846 94	31865 06	20990 94	10374 12	31865 06
Montgomery ..	7725 60	20646 20	5669 62	383 33	34424 75	23842 17	10582 58	34424 75
Muscatine ..	22864 35	32984 74	13648 47	840 80	70838 36	44180 17	26206 19	70838 36
O'Brien .....	4636 34	7245 47	1346 00	13 68	13241 49	9817 94	3423 55	13241 49
Osceola .....	864 55	4308 12	998 28	706 50	6877 45	5590 49	1286 96	6877 45
Page .....	17936 27	25668 21	8622 33	333 01	52559 82	34417 01	18142 81	52559 82
Palo Alto .....	5257 18	11913 56	1587 16	34 75	18792 60	12289 31	6503 29	18792 60
Plymouth .....	16310 55	19425 94	3896 77	472 59	40605 85	23026 55	17579 30	40605 85
Pocahontas ..	7289 98	10671 41	1517 72	227 77	19908 83	10335 78	9571 10	19908 83
Polk .....	32761 56	57512 87	17102 06	1011 50	108387 94	74749 05	33638 94	108387 99
Pot'wattamie	39826 36	59644 56	13657 25	2796 36	108884 53	74244 38	35640 15	108884 53
Poweshiek .....	24858 37	35294 60	9140 24	747 61	70040 82	43675 68	26365 14	70040 82
Ringgold .....	10155 56	16857 37	3610 37	535 27	30658 57	21921 83	8736 74	30658 57
Sac .....	11646 71	11172 41	1691 12	600 52	25110 76	14792 39	10818 37	25110 76
Scott .....	63718 48	68567 00	27226 63	661 90	160174 06	99355 90	60818 16	160174 06
Shelby .....	14100 77	19479 72	4619 51	183 06	38383 06	22883 41	15499 68	38383 06
Sioux .....	7932 72	12108 41	3779 82	270 77	24091 72	16091 77	7999 95	24091 72
Story .....	10882 14	27889 48	5811 56	563 78	44596 96	30166 02	14430 94	44596 96
Tama .....	30815 60	36974 47	9576 54	1222 98	78589 59	46147 29	32442 30	78589 59
Taylor .....	10759 03	28510 82	5607 56	777 69	45654 65	29898 41	15761 24	45654 65
Union .....	6921 86	23198 57	9167 16	278 65	39569 24	31713 04	7856 20	39569 24
Van Buren .....	17758 60	16498 82	6768 40	599 36	41625 18	23998 37	17626 81	41625 18
Wapello .....	18005 75	29436 99	11268 41	362 61	59078 76	40078 06	18995 70	59078 76
Warren .....	21274 92	23390 78	8960 78	749 54	54276 02	39444 02	23832 00	54276 02
Washington ..	17123 92	20210 08	9086 17	1074 42	47499 59	31862 83	15636 76	47499 59
Wayne .....	18068 85	18675 32	5844 83	2561 74	40168 74	25249 68	14919 06	40168 74
Webster .....	15785 11	20470 35	5160 67	2722 76	44118 89	29464 48	14654 41	44118 89
Winnebago ..	2786 44	4796 04	1756 96	12 50	9301 94	5990 50	8311 44	9301 94
Winneshiek ..	21394 75	23730 08	10277 11	349 84	55751 78	35694 97	20056 81	55751 78
Woodbury ..	15589 78	28671 27	11254 11	1298 81	56813 97	38388 92	18425 05	56813 97
Worth .....	7510 93	8776 69	4596 47	143 79	21027 93	12510 18	8517 75	21027 93
Wright .....	4727 77	11983 67	2187 02	302 52	19160 98	13961 37	5319 61	19160 98
Total .....	1515060 66	2327963 31	673097 82	100619 17	4622640 98	3011230 66	1611410 30	4622640 98



## ABSTRACT [C]

## EXAMINATION

	COUNTY.	PROF'SN'L CERTIFI- CATES ISSUED.		1ST GR'DE CERTIFI- CATES ISSUED.		2D GRADE CERTIFI- CATES ISSUED.		3D GRADE CERTIFI- CATES ISSUED.		TOTAL NUMBER ISSUED.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Adair.....	1	.....	27	27	27	53	7	15	62	95
2	Adams.....	.....	.....	30	21	34	26	.....	6	64	53
3	Allamakee .....	6	2	7	28	8	50	3	21	24	101
4	Appanoose....	.....	.....	43	55	35	44	11	19	89	118
5	Audubon.....	.....	.....	19	18	13	34	5	17	37	69
6	Benton .....	.....	.....	35	70	68	146	.....	.....	103	216
7	Black Hawk.....	3	.....	14	50	49	126	39	59	105	235
8	Boone .....	7	3	34	60	51	121	2	2	94	186
9	Bremer.....	13	6	38	98	40	91	5	4	96	199
10	Buchanan .....	2	.....	17	24	51	144	3	17	73	185
11	Buena Vista.....	.....	.....	8	20	5	17	4	21	17	58
12	Butler .....	.....	.....	32	51	30	95	3	21	65	167
13	Calhoun .....	.....	.....	15	8	18	21	10	34	43	63
14	Carroll .....	.....	.....	23	14	26	12	46	33	95	59
15	Cass .....	2	3	49	49	36	64	2	18	89	134
16	Cedar.....	.....	.....	21	26	40	79	9	34	70	139
17	Cerro Gordo.....	.....	.....	23	30	36	92	.....	.....	59	122
18	Cherokee .....	.....	1	27	39	12	87	2	13	41	90
19	Chickasaw .....	3	1	20	29	33	100	.....	.....	56	130
20	Clarke .....	1	.....	4	17	16	26	18	20	39	63
21	Clay .....	.....	.....	18	27	2	14	19	8	39	49
22	Clayton.....	12	2	15	22	47	88	19	66	93	208
23	Clinton.....	.....	.....	29	98	54	108	11	44	94	250
24	Crawford.....	.....	.....	16	12	18	30	7	27	41	69
25	Dallas .....	4	2	32	28	70	82	.....	.....	106	112
26	Davis.....	.....	.....	59	41	32	45	3	2	94	88
27	Decatur.....	.....	.....	16	9	23	31	12	42	51	82
28	Delaware.....	.....	.....	18	33	36	96	4	25	58	154
29	Des Moines .....	.....	.....	34	85	28	46	18	33	80	164
30	Dickinson .....	.....	.....	4	2	3	8	.....	7	7	17
31	Dubuque .....	13	4	20	60	16	82	6	25	55	171
32	Emmet.....	2	.....	6	6	4	10	4	4	16	20
33	Fayette .....	.....	.....	19	22	25	80	17	121	61	223
34	Floyd .....	.....	.....	22	24	12	41	5	76	39	141
35	Franklin .....	.....	.....	25	30	15	57	7	31	47	118
36	Fremont.....	.....	.....	23	21	15	35	.....	.....	38	56
37	Greene .....	2	2	23	88	15	48	3	29	43	117
38	Grundy.....	8	1	44	36	29	88	3	1	79	126
39	Guthrie.....	.....	.....	51	59	32	81	.....	.....	83	140
40	Hamilton .....	.....	.....	28	38	9	49	.....	.....	37	87
41	Hancock.....	.....	.....	7	2	6	22	14	19	27	43
42	Hardin .....	.....	.....	54	76	20	47	18	74	92	197
43	Harrison .....	.....	.....	40	33	11	81	.....	.....	51	114
44	Henry .....	.....	.....	23	47	17	58	2	10	42	115
45	Howard.....	.....	.....	20	25	13	30	3	20	36	75
46	Humboldt .....	.....	.....	8	16	14	23	3	14	25	53
47	Ida .....	.....	.....	6	4	11	9	10	13	27	26
48	Iowa.....	.....	.....	21	57	24	50	4	19	49	126
49	Jackson .....	.....	.....	9	12	2	7	36	155	47	174
50	Jasper .....	1	1	15	18	24	41	34	75	74	125

# REPORTS OF COUNTY SUPERINTENDENTS.

## REPORTS FOR 1878.

### OF TEACHERS.

APPLI- CANTS RE- JECTED.		APPLI- CANTS EX- AMINED.		CERTIFI- CATES RE- VOKED.		AVERAGE AGE OF APPLI- CANTS.		NO EXPE- RIENCE IN TEACHI'G.		TAUGHT LESS THAN 1 YEAR.		HOLDING STATE CE- TIFICATE	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
16	44	78	139	.....	.....	24	21	12	21	9	12	.....	.....
10	13	74	66	.....	.....	24	22	18	24	23	37	.....	.....
.....	11	24	112	.....	.....	22	20	7	31	8	22	.....	.....
5	7	94	125	.....	.....	24	21	9	13	14	17	.....	.....
.....	4	37	73	.....	.....	19	19	10	15	7	7	.....	.....
37	127	140	343	.....	.....	19	21	14	31	23	91	.....	.....
33	35	138	270	.....	.....	26	23	27	21	15	47	.....	.....
1	2	95	188	.....	.....	23	19	.....	7	.....	9	.....	.....
6	66	102	265	.....	.....	26	22	7	3	23	25	.....	.....
27	62	100	247	.....	.....	26	21	14	33	12	23	.....	.....
.....	5	17	63	.....	.....	25	18	6	12	2	6	.....	.....
26	70	91	237	1	.....	26	23	.....	7	2	15	.....	.....
10	29	53	92	.....	.....	24	22	3	8	9	15	.....	.....
54	31	149	90	.....	.....	23	20	19	26	21	29	.....	.....
.....	3	89	137	1	1	23	19	9	29	13	28	.....	.....
23	56	93	195	.....	.....	24	27	9	17	1	.....	.....	.....
24	97	83	219	.....	.....	23	19	6	23	23	26	.....	.....
2	10	43	100	.....	.....	23	23	17	.....	9	.....	.....	.....
16	15	72	145	.....	.....	27	23	4	28	2	11	.....	.....
6	16	45	79	..	.....	20	22	14	20	21	41	.....	.....
2	6	41	55	.....	.....	26	21	4	3	2	6	.....	.....
25	95	118	303	.....	.....	25	20	10	30	16	59	.....	.....
9	42	103	292	.....	.....	25	25	12	46	9	29	1	.....
10	26	51	95	.....	.....	24	21	6	9	15	30	.....	.....
16	24	122	136	.....	.....	22	19	12	21	17	23	1	.....
10	12	104	100	.....	.....	25	21	17	31	40	27	.....	.....
10	17	61	99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	76	74	230	.....	.....	23	20	12	35	6	21	.....	.....
7	13	87	177	.....	.....	29	22	13	24	11	39	1	.....
8	10	10	27	.....	.....	33	20	1	1	.....	3	.....	.....
7	32	62	203	.....	.....	29	24	4	7	.....	.....	.....	.....
.....	2	16	22	.....	.....	27	21	5	5	1	3	.....	.....
26	114	87	337	.....	.....	26	19	7	36	14	70	.....	.....
7	28	46	169	.....	.....	22	22	63	.....	29	.....	.....	.....
10	28	57	146	.....	.....	27	21	14	3	7	2	.....	.....
17	21	55	77	.....	.....	22	19	15	23	12	16	.....	.....
21	62	64	179	.....	.....	24	20	7	18	6	12	.....	.....
3	12	82	139	.....	.....	23	20	11	22	10	23	2	.....
12	36	95	176	....	1	26	22	8	14	24	41	.....	.....
3	20	40	107	.....	.....	25	21	4	19	1	7	.....	.....
1	8	28	51	.....	.....	25	25	3	5	2	8	.....	.....
122	312	214	509	.....	.....	25	21	9	26	16	37	2	.....
5	12	56	126	.....	.....	22	19	5	14	23	31	.....	.....
12	22	54	137	.....	.....	27	21	17	43	22	56	.....	.....
2	10	38	85	.....	.....	26	19	6	14	4	8	.....	.....
3	19	28	72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	6	32	32	.....	.....	22	19	5	6	8	12	.....	.....
9	35	58	161	.....	.....	23	20	4	19	8	30	.....	.....
15	43	62	217	.....	.....	20	21	8	43	10	67	.....	.....
25	35	99	170	.....	.....	25	21	13	20	15	25	.....	.....

## ABSTRACT [C]—CONTINUED.

## EXAMINATION

COUNTY.	PROF'SN'L CERTIFI- CATES ISSUED.		1ST GR'DE CERTIFI- CATES ISSUED.		2D GRADE CERTIFI- CATES ISSUED.		3D GRADE CERTIFI- CATES ISSUED.		TOTAL NUMBER ISSUED.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
51 Jefferson .....			44	40	35	51	5	26	84	117
52 Johnson .....			17	56	36	73	32	71	85	200
53 Jones .....	6	12	20	25	20	35	9	7	55	79
54 Keokuk .....			38	28	37	55	13	39	88	122
55 Kossuth.....			20	22	4	32	1	15	25	69
56 Lee .....			30	52	32	66	.....	.....	62	118
57 Linn .....	1	3	48	85	62	156	.....	.....	111	244
58 Louisa.....			13	14	15	30	30	77	58	121
59 Lucas.....	3	.....	27	32	26	46	5	32	61	110
60 Lyon .....			5	13	5	22	.....	.....	10	35
61 Madison .....	2	.....	45	39	32	59	20	44	99	142
62 Mahaska .....			46	63	51	137	.....	.....	97	200
63 Marion . .....			44	31	20	54	6	20	70	105
64 Marshall .....			20	24	68	122	16	42	104	188
65 Mills.....	2	1	24	25	8	33	5	19	39	78
66 Mitchell .....			26	12	26	42	34	82	86	136
67 Monona .....			31	21	10	49	8	18	49	88
68 Monroe.....			35	36	15	45	3	19	53	100
69 Montgomery .....			23	24	44	96	6	24	73	144
70 Muscatine.....	3	16	19	26	23	113	.....	.....	45	155
71 O'Brien.....			11	12	11	28	.....	.....	22	40
72 Osceola .....			4	8	4	13	.....	9	8	30
73 Page.....	17	13	29	38	25	92	3	31	74	174
74 Palo Alto.....			4	10	3	12	.....	7	7	29
75 Plymouth .....			15	17	17	18	8	30	40	65
76 Pocahontas.....	1	1	4	11	8	23	10	30	23	65
77 Polk.....			47	64	30	84	8	37	85	185
78 Pottawattamie .....	5	.....	25	50	43	72	25	46	98	168
79 Poweshiek.....	3	.....	40	34	33	45	12	31	88	110
80 Ringgold .....			36	21	21	44	12	28	69	93
81 Sac.....			12	17	20	31	5	25	37	73
82 Scott .....			64	91	35	66	12	13	111	170
83 Shelby .....	1	.....	40	24	36	40	4	9	81	73
84 Sioux .....			5	1	15	15	10	13	30	29
85 Story .....			36	22	34	47	26	53	96	122
86 Tama.....			43	51	59	139	19	67	121	257
87 Taylor.....			40	30	54	116	.....	.....	94	146
88 Union.....			30	41	12	20	8	20	50	81
89 Van Buren.....			34	21	50	108	.....	.....	84	129
90 Wapello .....			48	52	23	30	15	22	86	104
91 Warren.....			51	40	43	66	15	52	109	154
92 Washington .....	2	.....	27	39	78	101	3	38	110	176
93 Wayne.....	5	2	64	38	38	69	2	9	100	118
94 Webster .....			19	57	26	82	7	49	52	188
95 Winnebago .....	1	.....	2	4	10	14	2	8	15	26
96 Winneshiek.....			31	27	35	55	17	76	83	158
97 Woodbury .....	3	2	16	17	35	18	1	31	55	68
98 Worth.....			2	17	15	28	4	19	21	64
99 Wright.....			15	15	10	25	5	17	30	57
Total.....	130	78	2560	3252	2647	5682	857	2629	6194	11641



## REPORTS FOR 1878.

## OF TEACHERS.

APPLI- CANTS RE- JECTED.		APPLI- CANTS EX- AMINED.		CERTIFI- CATES RE- VOKED.		AVERAGE AGE OF APPLI- CANTS.		NO EXPE- RIENCE IN TEACHING		TAUGHT LESS THAN 1 YEAR.		HOLDING STATE CER- TIFICATES.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
4	30	88	147	....	....	25	21	16	28	11	19	1	1	51
20	35	105	235	....	....	24	20	10	29	....	....	....	2	52
....	....	55	79	....	....	28	20	....	....	....	....	....	....	53
29	45	117	167	1	....	23	21	15	32	30	62	....	....	54
3	8	28	77	....	....	32	21	4	8	4	15	....	....	55
4	6	66	124	1	1	....	....	....	....	....	....	....	....	56
10	15	121	259	....	....	23	22	26	41	33	39	1	1	57
30	62	88	183	....	....	27	22	8	13	11	19	....	1	58
7	59	68	169	....	....	27	21	11	24	13	21	....	....	59
....	3	10	38	1	....	24	21	2	6	3	4	....	....	60
10	20	109	162	....	....	22	19	13	21	12	20	....	....	61
14	88	111	288	....	....	....	....	....	....	....	....	....	....	62
13	10	83	115	....	....	....	....	6	20	....	....	....	....	63
62	117	166	305	....	....	26	24	8	5	7	12	2	....	64
7	19	46	97	....	....	29	22	5	16	7	17	....	1	65
5	27	91	163	....	....	24	23	11	25	7	13	....	....	66
1	4	50	92	....	....	....	....	....	....	....	....	....	....	67
8	2	61	122	....	....	24	21	10	12	15	17	....	....	68
4	5	77	149	....	....	26	21	9	33	13	14	....	....	69
44	78	89	233	....	....	23	18	11	39	16	46	1	....	70
....	19	22	59	....	....	20	18	2	6	....	....	....	....	71
1	7	9	37	....	....	24	22	....	5	....	....	....	....	72
18	49	92	223	....	....	23	20	5	26	4	26	....	....	73
1	9	8	38	....	....	22	20	1	7	1	14	....	....	74
10	31	50	96	....	....	24	20	3	3	5	19	....	....	75
3	12	26	77	....	....	24	22	4	13	6	21	....	....	76
23	51	108	236	....	....	24	20	15	43	20	17	2	4	77
10	20	108	188	....	....	22	25	....	....	....	....	....	....	78
20	40	108	150	....	....	28	21	1	12	6	10	....	....	79
13	27	82	120	....	....	....	....	....	....	....	....	....	....	80
12	6	49	79	....	....	20	22	11	4	....	....	....	....	81
12	23	123	193	....	....	29	23	11	13	4	21	1	4	82
5	10	86	83	....	....	21	25	10	18	4	8	....	....	83
8	13	38	42	....	....	24	18	7	10	10	13	....	....	84
12	51	108	173	....	....	25	19	8	20	34	49	....	....	85
7	27	128	284	....	....	25	20	27	55	14	31	....	1	86
20	30	114	176	....	....	25	22	8	18	12	25	....	....	87
5	15	55	98	....	....	....	....	....	....	....	....	....	....	88
11	27	95	156	....	....	24	19	11	16	24	32	....	....	89
4	8	90	112	....	....	23	21	14	25	23	30	....	....	90
32	58	141	216	....	....	26	22	23	30	17	23	....	....	91
9	23	119	201	....	....	26	22	13	24	6	25	....	1	92
1	7	110	125	....	....	24	18	....	....	....	....	....	....	93
5	75	57	263	1	....	26	19	10	70	12	65	....	....	94
1	1	16	27	....	....	24	20	2	2	2	2	....	....	95
12	47	95	205	....	....	24	21	9	31	23	50	....	....	96
....	....	55	68	....	....	....	....	4	16	....	....	....	....	97
4	9	25	73	....	....	23	21	6	7	11	24	....	....	98
20	30	50	87	....	....	24	21	....	....	....	....	....	....	99
1263	3259	7457	14900	6	3	24.54	20.90	870	1732	987	1969	14	21	

## ABSTRACT [D]

## VISITATION OF SCHOOLS, APPEALS, ETC., 1878.

COUNTY.	VISITATION OF SCHOOLS.			AP-PEALS.	COMPENSATION OF CO. SUPT.	PRIVATE SCHOOLS.		
	Schools visited by Co. Supt.	Visits made during y'r.	Ed's'l meetings held.			Number.	Teachers employed.	Pupils attending.
1 Adair.....	99	126	1	1	\$ 675.00	.....	.....	.....
2 Adams.....	60	75	8	3	468.00	1	1	.....
3 Allamakee.....	41	41	.....	1	270.00	1	3	60
4 Appanoose.....	140	160	21	1	600.00	.....	.....	.....
5 Audubon.....	75	75	.....	.....	483.00	.....	.....	.....
6 Benton.....	147	160	.....	1	714.00	2	6	150
7 Black Hawk.....	100	112	1	.....	711.00	3	7	180
8 Boone.....	65	76	2	.....	708.00	1	1	.....
9 Bremer.....	117	190	3	.....	585.00	.....	.....	.....
10 Buchanan.....	138	194	11	.....	808.50	2	6	186
11 Buena Vista.....	65	85	14	.....	247.55	.....	.....	.....
12 Butler.....	200	235	14	3	850.00	.....	.....	.....
13 Calhoun.....	67	129	.....	.....	342.00	.....	.....	.....
14 Carroll.....	37	51	1	2	499.00	.....	.....	.....
15 Cass.....	183	202	1	1	516.00	.....	.....	.....
16 Cedar.....	113	119	3	1	750.00	.....	.....	.....
17 Cerro Gordo.....	93	156	12	.....	718.00	1	1	14
18 Cherokee.....	90	138	1	1	625.00	.....	.....	.....
19 Chickasaw.....	180	191	9	3	853.50	.....	.....	.....
20 Clarke.....	78	90	.....	.....	567.00	.....	.....	.....
21 Clay.....	70	70	2	2	275.75	.....	.....	.....
22 Clayton.....	96	120	.....	.....	1088.30	4	7	245
23 Clinton.....	136	150	2	4	669.00	8	.....	.....
24 Crawford.....	63	64	10	1	535.50	.....	.....	.....
25 Dallas.....	130	198	13	6	681.00	.....	.....	.....
26 Davis.....	204	210	.....	4	676.00	2	5	.....
27 Decatur.....	68	75	.....	3	334.00	.....	.....	.....
28 Delaware.....	118	215	10	.....	693.00	3	9	282
29 Des Moines.....	41	51	1	.....	624.00	9	28	786
30 Dickinson.....	34	42	3	3	236.00	.....	.....	.....
31 Dubuque.....	115	144	3	.....	920.00	20	61	2325
32 Emmet.....	15	20	.....	1	174.00	.....	.....	.....
33 Fayette.....	134	219	1	2	600.00	1	10	200
34 Floyd.....	111	111	12	1	599.00	.....	.....	.....
35 Franklin.....	89	140	.....	.....	702.00	.....	.....	.....
36 Fremont.....	130	182	6	1	690.00	1	7	142
37 Greene.....	124	177	1	1	684.00	1	5	155
38 Grundy.....	.....	.....	.....	2	257.05	1	1	.....
39 Guthrie.....	120	180	2	3	900.00	1	2	60
40 Hamilton.....	98	98	5	.....	501.00	.....	.....	.....
41 Hancock.....	45	75	3	.....	350.00	.....	.....	.....
42 Hardin.....	132	176	1	.....	696.00	2	3	35
43 Harrison.....	.....	.....	.....	.....	120.00	.....	.....	.....
44 Henry.....	112	187	13	.....	651.00	4	17	355
45 Howard.....	40	100	5	3	480.00	1	1	20
46 Humboldt.....	57	96	3	.....	248.80	1	2	19
47 Ida.....	35	130	33	.....	384.00	.....	.....	.....
48 Iowa.....	155	161	2	.....	750.00	1	2	40
49 Jackson.....	94	100	11	2	663.00	.....	.....	.....
50 Jasper.....	135	170	.....	4	684.00	2	3	.....

## VISITATION OF SCHOOLS, APPEALS, ETC., 1878.

COUNTY.	VISITATION OF SCHOOLS.			AP-PEALS.	COMPENSATION OF CO. SUPT.	PRIVATE SCHOOLS.		
	Schools visited by Co. Supt.	Visits made during y'r.	Ed'cl meetings held.			Number.	Teachers employed.	Pupils attending.
51 Jefferson .....	115	123	1	.....	\$531.00	2	8	101
52 Johnson .....	75	75	.....	.....	738.00	3	6	140
53 Jones .....	154	278	3	6	730.00	1	1	30
54 Keokuk .....	157	245	4	2	687.00	3	4	110
55 Kossuth .....	68	121	11	2	369.00	3	4	75
56 Lee .....	80	150	.....	.....	699.00	1	.....	.....
57 Linn .....	115	115	.....	6	610.00	2	29	570
58 Louisa .....	95	159	1	1	663.00	1	11	153
59 Lucas .....	75	87	2	1	578.00	1	1	30
60 Lyon .....	37	75	1	.....	450.00	.....	.....	.....
61 Madison .....	120	200	.....	.....	830.00	.....	.....	.....
62 Mahaska .....	43	77	3	3	669.00	2	13	255
63 Marion .....	115	130	.....	.....	900.00	2	8	248
64 Marshall .....	68	68	.....	.....	760.00	2	8	100
65 Mills .....	58	100	3	1	605.50	1	2	54
66 Mitchell .....	70	144	.....	1	606.00	1	6	187
67 Monona .....	53	79	1	.....	472.50	.....	.....	.....
68 Monroe .....	78	156	.....	.....	639.00	.....	.....	.....
69 Montgomery .....	150	225	3	.....	881.00	.....	.....	.....
70 Muscatine .....	143	169	4	1	700.00	2	.....	165
71 O'Brien .....	58	109	3	.....	254.00	.....	.....	.....
72 Osceola .....	34	52	.....	.....	270.00	.....	.....	.....
73 Page .....	85	107	7	1	569.85	1	3	95
74 Palo Alto .....	15	15	.....	.....	240.00	.....	.....	.....
75 Plymouth .....	47	58	1	1	260.00	.....	.....	.....
76 Pocahontas .....	60	98	4	.....	243.00	.....	.....	.....
77 Polk .....	164	180	3	1	681.00	7	29	940
78 Pottawattamie .....	152	201	.....	2	475.00	2	6	186
79 Poweshiek .....	95	125	4	1	800.00	1	.....	.....
80 Ringgold .....	115	214	.....	2	357.00	.....	.....	.....
81 Sac .....	73	152	2	.....	340.00	.....	.....	.....
82 Scott .....	109	258	11	.....	988.00	11	58	2258
83 Shelby .....	85	135	3	2	417.00	.....	.....	.....
84 Sioux .....	90	100	2	1	500.00	.....	.....	.....
85 Story .....	120	126	3	1	831.18	1	19	245
86 Tama .....	141	251	4	.....	782.00	.....	.....	.....
87 Taylor .....	110	110	15	.....	600.00	.....	.....	.....
88 Union .....	52	112	.....	1	427.25	1	1	15
89 Van Buren .....	76	91	6	.....	702.00	1	3	19
90 Wapello .....	55	57	.....	.....	684.00	5	8	353
91 Warren .....	62	78	.....	1	624.00	2	8	242
92 Washington .....	85	85	12	.....	588.50	2	7	240
93 Wayne .....	76	82	4	4	534.00	.....	.....	.....
94 Webster .....	80	85	.....	1	422.45	2	4	200
95 Winnebago .....	35	70	1	.....	240.00	.....	.....	.....
96 Winneshiek .....	137	164	5	1	928.00	.....	.....	.....
97 Woodbury .....	82	72	.....	.....	679.10	.....	.....	.....
98 Worth .....	60	90	4	.....	303.00	.....	.....	.....
99 Wright .....	70	140	2	.....	390.00	.....	.....	.....
Total .....	9029	12459	868	105	\$57104.78	136	435	12265

## ABSTRACT [E]

## TEACHERS'

	COUNTY.	WHERE HELD.	TIME.		TEACHERS IN AT-TENDANCE.		
			Com'encing.	Continuing weeks.	Males.	Females.	Total.
1	Adair.....	Greenfield .....	Mar. 18	4	40	110	150
2	Adams.....	Corning.....	Aug. 5	4	20	57	77
3	Allamakee.....	Waukon .....	Aug. 12	3	12	73	85
4	Appanoose .....	Centerville.....	July 22	4	67	27	94
5	Audubon.....	Exira .....	Aug. 5	3	20	55	75
6	Benton.....	Vinton.....	Aug. 5	4	57	175	232
7	Black Hawk.....	Waterloo.....	Aug. 12	3	25	116	141
8	Boone.....	Boonsboro.....	Aug. 26	2	40	92	132
9	Bremer.....	Waverly.....	Aug. 12	2	21	73	94
10	Buchanan.....	Independence.....	July 29	5	22	141	163
11	Buena Vista.....	Storm Lake.....	Mar. 25	2	8	39	47
12	Butler.....	Clarksville .....	Aug. 5	4	31	105	136
13	Calhoun.....	Lake City.....	Sep. 30	2	21	37	58
14	Carroll .....	Carroll City.....	Sep. 2	2	52	58	110
15	Cass.....	Atlantic.....	Aug. 5	4	21	79	100
16	Cedar .....	Tipton .....	July 22	3	28	111	139
17	Cerro Gordo.....	Mason City.....	Aug. 12	4	20	73	93
18	Cherokee .....	Cherokee .....	July 8	3	21	66	87
19	Chickasaw.....	New Hampton.....	Apr. 1	2	24	63	87
20	Clarke.....	Osceola .....	Aug. 12	3	14	77	91
21	Clay.....	Spencer .....	Sep. 2	2	16	45	61
22	Clayton .....	Elkader .....	July 15	3	18	100	118
23	Clinton .....	De Witt.....	July 29	4	24	123	147
24	Crawford.....	Denison. ....	Aug. 26	2	30	54	84
25	Dallas.....	Adel .....	Aug. 14	4	71	99	170
26	Davis.....	Bloomfield .....	July 30	4	48	93	141
27	Decatur .....	Leon.....	Aug. 5	4	38	96	134
28	Delaware .....	Manchester .....	Aug. 12	3	61	189	250
29	Des Moines.....	Burlington .....	Aug. 5	3	28	52	80
30	Dickinson.....	Spirit Lake.....	Mar. 18	3	27	15	42
31	Dubuque.....	Dubuque .....	Aug. 12	3	16	127	143
32	Emmet .....	Estherville.....	Aug. 26	2	10	16	26
33	Fayette.....	Fayette.....	July 29	3	15	83	98
34	Floyd.....	Charles City.....	July 8	3	21	110	131
35	Franklin.....	Hampton .....	Aug. 12	4	15	108	123
36	Fremont .....	Hamburg.....	July 29	2	22	66	88
37	Greene.....	Jefferson.....	Aug. 12	4	45	140	185
38	Grundy.....	Grundy Center....	Sep. 2	6	39	90	129
39	Guthrie .....	Guthrie Center....	Aug. 5	4	38	104	142
40	Hamilton.....	Webster City.....	Mar. 25	4	30	91	121
41	Hancock.....	Garner.....	Sep. 2	4	7	36	43
42	Hardin .....	Iowa Falls .....	Aug. 12	4	29	113	142
43	Harrison.....	Logan.....	July 15	2	26	74	100
44	Henry.....	Mt. Pleasant.....	July 29	4	47	120	167
45	Howard.....	Lime Springs.....	Apr. 1	2	16	57	73
46	Humboldt .....	Humboldt .....	Oct. 7	4	16	45	61
47	Ida.....	Ida Grove.....	Aug. 19	2	10	24	34
48	Iowa.....	Marengo .....	July 22	3	25	108	133
49	Jackson.....	Bellevue .....	Aug. 19	2	55	72	127
50	Jasper.....	Newton .....	Aug. 5	4	68	157	225

REPORTS FOR 1878.

NORMAL INSTITUTES.

INSTITUTE FUND.										
RECEIPTS.						EXPENDITURES.				
On hand at last report	Examinati'n fees.	Registration fees.	State appropiation.	Sundries.	Total.	Instruction.	Incidentals.	Un'xpended	Total.	
.....	78	150	50	18.50	296.50	252.25	44.25	.....	296.50	1
80	191	77	50	.....	318.80	250.00	51.00	17.80	318.80	2
205.60	104	85	50	10.58	455.18	341.50	32.18	81.50	455.18	3
91.30	125	94	50	.....	360.30	257.50	52.85	49.95	360.30	4
19.40	107	75	50	6.00	257.40	249.90	7.50	.....	257.40	5
475.97	319	232	50	.....	1076.97	547.50	79.10	450.37	1076.97	6
343.43	398	141	50	.....	932.43	444.50	80.75	407.18	932.43	7
5.63	253	132	50	.....	440.63	332.00	56.75	51.88	440.63	8
359.95	205	94	50	.....	708.95	158.00	66.12	484.83	708.95	9
.....	268	163	50	.....	481.00	392.50	.....	88.50	481.00	10
95.49	27	47	50	105.51	325.00	220.00	24.32	80.68	325.00	11
26.65	289	136	50	.....	501.65	387.90	65.10	48.65	501.65	12
9.51	98	58	50	.21	215.72	110.00	12.80	92.92	215.72	13
29.50	126	110	50	.50	316.00	296.00	17.00	3.00	316.00	14
.....	209	100	50	.....	359.00	287.85	10.90	60.25	359.00	15
16.90	258	139	50	.....	463.90	418.00	44.75	1.15	463.90	16
42.77	211	93	50	7.30	404.07	333.50	59.23	11.34	404.07	17
54.83	154	87	50	.....	345.83	218.00	81.15	46.68	345.83	18
134.25	213	87	50	.....	484.25	235.00	21.45	227.80	484.25	19
24.15	100	91	50	.....	265.15	170.00	48.40	46.75	265.15	20
54.70	54	61	50	.85	220.55	135.00	23.16	62.39	220.55	21
47.00	349	118	50	.65	564.65	387.00	54.65	123.00	564.65	22
438.15	332	147	50	.....	967.15	572.30	40.00	354.85	967.15	23
175.70	72	84	50	.....	381.70	175.00	67.00	139.70	381.70	24
83.40	218	170	50	.....	521.40	416.00	68.35	37.05	521.40	25
.68	131	141	50	.....	322.68	260.00	61.55	1.13	322.68	26
16.65	215	134	50	.....	415.65	335.00	16.50	64.15	415.65	27
49.05	269	250	50	7.50	625.55	460.75	160.45	4.35	625.55	28
47.50	274	80	50	.....	451.50	335.00	26.50	90.00	451.50	29
.....	31	42	50	50.00	173.00	168.00	5.00	.....	173.00	30
71.55	232	143	50	.....	496.55	410.60	82.20	3.75	496.55	31
.30	41	26	50	20.05	137.35	128.00	9.35	.....	137.35	32
30.65	250	98	50	.....	428.65	337.00	25.00	16.65	428.65	33
285.01	133	131	50	.85	599.86	380.00	29.10	190.76	599.86	34
.....	175	123	50	12.91	360.91	290.00	70.91	.....	360.91	35
41.00	63	88	50	.....	242.00	137.50	4.50	100.00	242.00	36
12.00	176	185	50	.....	423.00	419.35	3.65	.....	423.00	37
88.50	165	129	50	355.50	788.00	323.00	82.10	382.90	788.00	38
4.45	129	142	50	.....	325.45	260.00	20.10	45.35	325.45	39
120.00	80	121	50	.....	371.00	274.00	96.37	.63	371.00	40
10.15	70	43	50	.....	173.15	140.00	.....	33.15	173.15	41
213.90	316	142	50	.....	721.90	376.56	26.50	318.84	721.90	42
184.54	183	100	50	.....	517.54	193.50	10.80	313.24	517.54	43
43.50	157	167	50	.....	417.50	340.00	25.50	52.00	417.50	44
.....	102	73	50	.82	225.82	215.00	4.00	6.82	225.82	45
110.20	135	61	50	.....	356.20	170.00	35.15	151.05	356.20	46
.....	57	34	50	.....	141.00	105.00	36.00	.....	141.00	47
96.20	233	133	50	.....	512.20	380.00	77.60	54.60	512.20	48
.....	211	127	50	300.00	688.00	370.00	127.75	190.25	688.00	49
197.59	508	225	50	.....	980.59	611.75	24.98	343.86	980.59	50

## ABSTRACT [E]—CONTINUED.

## TEACHERS'

COUNTY.	WHERE HELD.	TIME.		TEACHERS IN ATTENDANCE.		
		Commenc- ing.	Continuing weeks.	Males.	Females.	Total.
51 Jefferson .....	Fairfield .....	July 29	4	41	84	125
52 Johnson .....	Iowa City.....	Aug. 5	3	36	152	188
53 Jones .....	Anamosa .....	Aug. 12	2	40	80	120
54 Keokuk .....	Sigourney .....	Aug. 5	4	78	153	231
55 Kossuth.....	Algona .....	Sep. 30	2	15	48	63
56 Lee .....	Fort Madison.....	July 15	3	5	24	30
57 Linn .....	Marion .....	Aug. 12	3	33	115	148
58 Louisa.....	Morning Sun.....	July 22	3	31	86	117
59 Lucas.....	Chariton.. ..	July 29	4	25	78	103
60 Lyon .....	Rock Rapids.....	Sep. 2	2	7	27	34
61 Madison .....	Winterset.....	July 29	4	35	118	153
62 Mahaska .....	Oskaloosa.....	July 29	4	66	174	240
63 Marion . .....	Knoxville .....	Aug. 19	3	23	45	68
64 Marshall.....	Marshalltown.....	Aug. 12	4	84	135	219
65 Mills.....	Glenwood.....	Aug. 5	3	32	100	132
66 Mitchell .....	Osage .....	Aug. 5	4	11	46	57
67 Monona .....	Onawa City.....	July 22	3	22	44	66
68 Monroe.....	Albia .....	Aug. 5	4	20	71	91
69 Montgomery .....	Red Oak.....	Aug. 5	3	25	69	94
70 Muscatine.....	Muscatine .....	July 29	3	31	114	145
71 O'Brien.....	Primghar .....	Oct. 14	2	21	33	54
72 Osceola .....	Sibley .....	Apr. 8	2	5	28	33
73 Page.....	Clarinda .....	July 22	4	32	159	191
74 Palo Alto.....	Emmetsburg.....	Oct. 14	3	16	44	60
75 Plymouth .....	Lemars .....	Aug. 19	2	15	53	68
76 Pocahontas.....	Pocahontas Center....	Oct. 14	2	11	27	38
77 Polk.....	Des Moines.....	Aug. 12	3	27	196	223
78 Pottawattamie .....	Council Bluffs.....	July 29	4	38	86	124
79 Poweshiek.....	Grinnell .....	Aug. 5	4	75	129	204
80 Ringgold .....	Mt. Ayr.....	July 15	4	30	76	106
81 Sac.....	Sac City.....	Sep. 9	3	8	36	44
82 Scott .....	Davenport .....	Aug. 12	3	51	96	147
83 Shelby .....	Harlan .....	Aug. 19	4	22	37	59
84 Sioux .....	Orange City.....	Sep. 3	2	20	16	36
85 Story .....	Nevada .....	Aug. 19	3	47	104	151
86 Tama.....	Toledo.....	Aug. 12	4	42	140	182
87 Taylor.....	Bedford .....	Aug. 5	4	46	84	130
88 Union.....	Afton .....	Aug. 5	4	19	62	81
89 Van Buren.....	Keosauqua.....	Aug. 5	4	66	105	171
90 Wapello .....	Ottumwa .....	Aug. 5	4	23	61	84
91 Warren.....	Indianola.....	Aug. 5	3	45	114	159
92 Washington .....	Washington .....	July 29	4	50	115	165
93 Wayne.....	Allerton .....	July 15	4	20	68	88
94 Webster .....	Fort Dodge .....	Aug. 12	3	21	101	122
95 Winnebago .....	Lake Mills.....	Sep. 2	2	11	20	31
96 Winneshiek.....	Decorah .....	Apr. 1	2	54	142	196
97 Woodbury .....	Correctionville.....	Aug. 15	2	27	59	86
98 Worth.....	Northwood .....	Mar. 18	3	5	57	62
99 Wright.....	Clarion .....	Sep. 23	2	25	40	65
Total.....			3.19	3008	8285	11293

\* A deficiency, by H. A. Huff, former superintendent, of \$167.50. † For two years.  
 ‡ \$70 refunded to the county in 1877. § Of which \$181.62 were county appropriations.



REPORTS FOR 1878.  
NORMAL INSTITUTES.

INSTITUTE FUND.										
RECEIPTS.						EXPENDITURES.				
On hand at last report.	Examina- tion fees.	Registration fees.	State appro- priation.	Sundries.	Total.	Instruction.	Incidentals.	Un'xpende	Total.	
\$111.00	\$ 131	\$ 125	\$ 50	\$.....	\$ 417.00	\$320.00	\$36.40	60.60	417.00	51
6.00	279	188	50	.....	523.00	458.00	48.00	17.00	523.00	52
19.00	81	120	50	.....	270.00	231.00	39.00	.....	270.00	53
99.25	245	231	50	.....	625.25	424.80	39.50	160.95	625.25	54
3.85	103	63	50	.15	220.00	195.00	21.00	4.00	220.00	55
4.00	162	30	50	.....	246.00	200.00	46.00	.....	246.00	56
143.25	355	148	50	.....	696.25	549.00	40.00	107.25	696.25	57
36.15	290	117	50	.35	493.50	391.10	13.95	88.45	493.50	58
48.75	168	103	50	.90	370.65	253.00	59.35	58.30	370.65	59
15.50	23	34	50	23.00	145.50	115.00	30.50	.....	145.50	60
189.90	216	153	50	.....	608.50	424.50	25.00	159.40	608.90	61
247.50	321	240	50	.....	858.50	473.25	67.35	317.90	858.50	62
35.00	183	68	50	.....	336.00	279.00	13.00	44.00	336.00	63
.....	192	219	50	145.16	606.16	488.26	117.90	.....	606.16	64
74.60	86	132	60	.....	342.60	308.00	18.00	16.60	342.60	65
56.52	142	57	50	.....	305.52	300.00	2.50	3.02	305.52	66
56.29	154	66	50	27.21	353.50	310.00	41.09	2.41	353.50	67
20.60	162	91	50	.....	323.60	225.00	79.20	19.40	323.60	68
46.16	167	94	50	28.30	385.46	273.75	41.45	70.26	385.46	69
9.00	210	145	50	.....	414.00	383.00	3.00	28.00	414.00	70
9.57	57	54	50	4.21	174.78	125.00	10.00	39.78	174.78	71
.....	28	33	50	30.00	139.00	125.00	13.00	1.00	139.00	72
117.05	288	191	50	.....	646.05	410.70	92.85	142.50	646.05	73
113.00	81	60	50	4.50	308.50	†290.70	.....	17.80	308.50	74
26.80	111	68	50	.....	255.80	205.00	43.00	7.30	255.80	75
30.50	34	38	50	7.00	159.50	78.00	42.85	38.65	159.50	76
70.00	264	223	50	.50	607.50	363.50	†96.50	147.50	607.50	77
249.80	229	124	50	.....	652.80	423.00	32.10	197.70	652.80	78
158.27	198	204	50	.....	610.27	452.00	39.00	119.27	610.27	79
.....	158	106	50	.....	314.00	295.92	9.85	8.23	314.60	80
272.44	164	44	50	.....	530.44	150.00	10.38	370.06	530.44	81
1.67	334	147	50	.....	532.67	435.00	70.00	27.67	532.67	82
67.55	159	59	50	.....	335.55	257.50	29.35	48.70	335.55	83
102.00	59	36	50	.....	247.00	142.00	8.75	96.25	247.00	84
328.99	233	151	50	.....	762.99	360.00	105.59	297.40	762.99	85
197.61	336	182	50	6.00	771.61	447.00	163.15	161.46	771.61	86
285.96	192	130	50	.....	657.96	309.00	20.00	328.96	657.96	87
17.45	128	81	50	.32	276.77	238.35	29.15	9.27	276.77	88
24.80	273	171	50	.50	519.30	174.06	216.56	128.68	519.30	89
20.43	187	84	50	.....	341.43	297.50	41.70	2.23	341.43	90
*145.50	266	159	50	30.00	650.50	305.00	68.15	277.35	650.50	91
95.50	246	165	50	.....	556.50	398.25	57.10	101.15	556.50	92
.....	95	88	50	.....	233.00	190.00	31.35	11.65	233.00	93
2.30	77	122	50	.....	251.30	220.00	26.96	4.34	251.30	94
38.65	28	31	50	.....	147.65	108.25	.75	38.65	147.65	95
12.67	217	196	50	.....	475.67	385.00	33.96	56.71	475.67	96
1.12	95	86	50	.....	232.12	126.00	59.50	46.62	232.12	97
54.25	72	62	50	.....	238.25	145.00	8.50	84.75	238.25	98
78.50	131	65	50	.....	324.50	68.00	138.85	117.65	324.50	99
8103.20	17502	11293	4950	1205.83	43054.03	29183.60	4451.41	9419.02	43054.03	

## ABSTRACT [E]—CONTINUED.

## TEACHERS' NORMAL INSTITUTES.

COUNTY.	CONDUCTOR.	ASSISTANT INSTRUCTOR.
1 Adair.....	D. G. Perkins.....	J. W. Boyer, J. B. Rhoades, J. L. McKinny and M. W. Haver.....
2 Adams.....	R. G. Gilson.....	J. H. Leckliter, D. E. Moffit and Mrs. E. A. G. Karnes.....
3 Allamakee.....	Amos Rowe.....	Miss A. E. Bucklin, J. S. Tucker, J. W. Hinchon and L. Eells.....
4 Appanoose.....	D. R. Guernsey....	T. C. Campbell, G. W. Guthrie, Geo. W. Bryan and A. J. Stone.....
5 Audubon.....	A. E. Clarenden	H. C. Nash.....
6 Benton.....	L. T. Weld.....	W. H. Sisson, J. McCarty, W. H. Brinkerhoff and Mrs. N. M. Rich.....
7 Black Hawk.....	J. C. Gilchrist.....	J. K. Sweeney, J. McNaughton and D. S. Wright.....
8 Boone.....	O. H. Baker.....	N. E. Goldthwaite, W. P. Todd, H. E. Hammond and Miss S. Collier.....
9 Bremer.....	M. W. Bartlett....	A. W. Rich.....
10 Buchanan.....	W. E. Parker.....	W. Elden, W. H. Robertson and M. Booth.....
11 Buena Vista.....	J. Wernli.....	Mrs. Harmon, I. C. Harlan and P. H. Conley.....
12 Butler.....	A. W. Stuart.....	N. Messer, W. F. Cramer, W. E. Traer and J. W. Stewart.....
13 Calhoun.....	J. Wernli.....	
14 Carroll.....	W. E. Crosby.....	I. H. De Wolfe, Mrs. M. T. Hatch, E. R. Hastings, A. G. Riley and G. Cull.....
15 Cass.....	J. E. Harlan.....	R. H. Frost and Miss J. Coldren.....
16 Cedar.....	J. Valentine.....	Miss Lucy Curtis, A. C. Ross, Mary H. Kilbourne and Lida Hanna.....
17 Cerro Gordo.....	J. Valentine.....	Miss M. McCowen, A. W. McCready, M. H. Kling and J. F. Grawe.....
18 Cherokee.....	J. C. Gilchrist.....	C. P. Bowman and W. F. Wentworth.....
19 Chickasaw.....	W. D. Collins.....	E. Baker and Miss Lucy Curtis.....
20 Clarke.....	B. F. Hood.....	O. C. Scott and Miss M. Osmande.....
21 Clay.....	J. C. Yocum.....	Mrs. H. Duncan.....
22 Clayton.....	R. Saunderson....	J. F. Thompson and C. P. Clark.....
23 Clinton.....	J. H. Blodgett....	C. Robinson, Julia J. Sweet and Mary J. Bolce....
24 Crawford.....	J. D. Hornby.....	C. C. Chamberlain and Z. T. Hawk.....
25 Dallas.....	M. E. Phillips.....	D. G. Perkins and C. M. Pinkerton.....
26 Davis.....	O. A. Shotts.....	A. H. Conrad, J. C. Dunlavy and Miss S. Young....
27 Decatur.....	R. A. Harkness....	C. M. Des Isles, T. J. Hasty, R. L. Parrish and Miss J. R. Pollard.....
28 Delaware.....	R. M. Ewart.....	T. H. McBride, S. Calvin, W. M. Wilcox, C. D. Clark and Mrs. M. A. Chapel.....
29 Des Moines.....	R. Saunderson....	W. J. Sampson.....
30 Dickinson.....	A. W. Osborne....	Miss K. M. Crary, W. F. Pillsbury, R. B. Nichol and R. A. Smith.....
31 Dubuque.....	N. W. Boyes.....	O. A. Brownson, C. G. Kretschmer, T. M. Irish, W. J. Shoup, Miss M. Murdock and W. Jones....
32 Emmet.....	R. H. Whipple....	Mrs. H. I. Farnum, L. S. Williams, R. I. Crotty and F. Davey.....
33 Fayette.....	E. E. Fitch.....	J. C. Burch, G. Brousseau, F. A. Duncan and I. M. McIntosh.....
34 Floyd.....	T. H. Smith.....	J. C. Yocum, H. Davidson, A. E. Hitchcock and Miss A. E. Bucklin.....
35 Franklin.....	L. B. Cary.....	W. D. Evans and I. W. Myers.....
36 Fremont.....	E. J. H. Beard.....	R. H. Scofield.....
37 Greene.....	E. Baker.....	A. G. Riley, Miss L. Hanna, Miss E. M. Child and J. M. Mehan.....
38 Grundy.....	S. D. Gaylord.....	R. D. Seaman and J. E. Martin.....
39 Guthrie.....	J. H. Robinson..	M. M. Wagner, Mrs. T. D. Headley and G. C. Miller.....
40 Hamilton.....	E. R. Eldridge....	A. H. Sniff, G. H. Carroll, J. K. Sweeney and O. M. Welster.....
41 Hancock.....	D. G. Perkins.....	A. C. Ripley and Mary P. Wright.....
42 Hardin.....	J. W. Stephens....	A. A. Weaver, D. A. Hamm, W. E. Crosby and Anna Richardson.....
43 Harrison.....	J. Wernli.....	
44 Henry.....	J. W. Palm.....	B. L. Cozier, S. C. Howe, O. S. Howe, Anna E. Packer, Dr. Beattie and A. Linn.....
45 Howard.....	L. T. Weld.....	J. Breckenridge and Miss F. Hollister.....
46 Humboldt.....	E. P. Rowell.....	A. Earthman.....
47 Ida.....	J. L. Weaver.....	C. Bowman.....
48 Iowa.....	C. P. Rogers.....	Miss K. N. Tupper and W. D. Evans.....
49 Jackson.....	H. L. Boltwood...	W. H. Fort, S. N. Fellows, C. E. Smith, Miss S. D. Stewart, Mrs. A. R. Darling, J. W. Fleming and Miss A. Barnes.....
50 Jasper.....	J. B. Reynolds....	R. O. Young, M. E. Rudolph, T. R. Hamlin and Mrs. M. Carns.....



## ABSTRACT [E]—CONTINUED.

## TEACHERS' NORMAL INSTITUTES.

	COUNTY.	CONDUCTOR.	ASSISTANT INSTRUCTORS.
51	Jefferson .....	J. Grinstead.....	J. C. Stevens, C. L. Stevens and G. W. Williams..
52	Johnson.....	A. A. Guthrie.....	J. C. Armentrout, F. R. Williams and Mrs. F. A. Sweet...
53	Jones .....	O. E. Aldrich.....	L. Foster, C. S. Shepard, Park Hill and Miss K. Curtiss .....
54	Keokuk.....	H. D. Todd.....	J. Baldwin, J. J. Pollard, Mary D. Todd, J. E. Richardson and E. B. McKeever.....
55	Kossuth.....	W. F. Davis.....	G. Schenck and Miss E. J. Meade.....
56	Lee.....	N. C. Campbell....	A. McCalla and W. J. Medes.....
57	Linn.....	J. W. McClellan..	J. W. Ackers, H. H. Freer, and Mrs. A. B. Billington.....
58	Louisa.....	E. R. Eldridge.....	R. B. Huff, H. C. Hollingsworth, W. Beattie and Miss F. M. Littlefield.....
59	Lucas .....	C. W. Bigger ....	Mrs. R. A. Stewart and Miss C. E. Campbell.....
60	Lyon.....	J. Wernli.....	Miss K. N. Tupper.....
61	Madison .....	G. S. Wedgwood..	Prof. Mowatt and H. E. Johnson.....
62	Mahaska .....	H. H. Seerley....	G. H. Laughlin, J. W. Johnson and Myra Irwin.
63	Marion .....	C. C. Cory.....	J. W. Johnson, A. P. Applegate and R. M. Mulkey.....
64	Marshall.....	C. P. Rogers.....	G. B. Melklejohn, Miss K. N. Tupper, W. W. Speer and Miss L. Hanna.....
65	Mills.....	W. L. Long.....	E. J. H. Beard, Miss M. Hartman, J. A. McLain E. B. Parrish .....
66	Mitchell.....	Alva Bush.....	J. F. Clyde and A. C. Ross.....
67	Monona .....	E. Baker. ....	Geo. S. Houghton.....
68	Monroe.....	A. J. Casaday.....	M. W. Cook, H. J. Bell, Mary E. Shahan and Nannie McCahan.....
69	Montgomery...	W. P. Pattison....	E. A. Haight, W. C. Davis and H. M. Moore.....
70	Muscatine.....	F. M. Witter.....	G. S. Bradley, Lizzie Clark, Clara Lillibridge and T. R. Hamlin.....
71	O'Brien.....	E. Baker.....	.....
72	Osceola. ....	J. Wernli.....	H. Neill, W. H. Smalley and Mrs. W. L. Parker..
73	Page .....	E. Miller.....	J. A. Woods, A. Grimes, M. L. Bennett, W. R. Collicotte and Miss F. M. Long.....
74	Palo Alto. ....	W. F. Davis .....	Mrs. M. A. Nolan.....
75	Plymouth.....	J. Wernli.....	S. G. Rogers .....
76	Pocahontas.....	Wm. Hoy. ....	D. Miller and F. Wentworth.....
77	Polk .....	J. H. Thompson..	T. H. Smith, W. H. Dixon, J. W. King and Abby Fowle .....
78	Pottawattamie	G. W. Cullison. .	W. H. Hatch and E. P. Noble .....
79	Poweshiek .....	W. R. Akers.....	A. C. Hart, A. T. Free, W. M. Cross, Susie J. Whitcomb, A. C. Osborne and G. H. Needham .....
80	Ringgold .....	R. A. Harkness...	Miss A. Hine, G. A. Slentz, W. E. Andrews and W. J. Work.....
81	Sac .....	J. D. McDade.....	M. E. Slentz .....
82	Scott.....	C. H. Clemmer....	J. R. Bowman, L. A. Rose and J. M. De Armond.
83	Shelby.....	E. P. Rowell.....	W. W. Girton.....
84	Sioux.....	G. J. Kollen. ....	J. Kolrood .....
85	Story .....	E. R. Eldridge...	W. P. Payne, Mrs. A. M. Payne and J. M. Mehan.
86	Tama .....	H. A. Brown.....	J. J. Andrews, W. H. Black, F. B. Gault, W. Clark, C. A. Wessel and Mrs. A. H. Sterrett.....
87	Taylor.....	J. B. Owens.....	W. W. Wylie, J. C. Kerr, O. Campbell and I. W. Sherlock.....
88	Union.....	J. D. Thomas.....	C. B. Stayt, Mrs. C. B. Stayt, Mrs. M. T. Hatch and H. S. De Sollar..
89	Van Buren.....	J. H. Landes. ....	Cora E. Letts .....
90	Wapello.....	A. Hull.....	H. C. Hollingsworth and Nellie Bell.....
91	Warren .....	J. D. Hornby.....	E. M. Cotton and G. W. Samson .....
92	Washington...	D. W. Lewis.....	Mrs. M. H. Lewis, Miss M. E. Tillotson and Miss J. A. Disbro.....
93	Wayne.....	G. W. Cullison ...	A. B. Warner and G. W. Krall .....
94	Webster.....	A. N. Ozias.....	M. F. Arey and Mrs. A. N. Ozias.....
95	Winnebago.....	J. W. Jones.....	.....
96	Winneshiek....	N. Kessey.....	H. A. Bottsford, Marion Murdock, Miss A. E. Bucklin, Emily S. Lawton, C. H. Valder, H. L. Coffeen, J. H. Carroll, J. S. Tucker et al.....
97	Woodbury.....	S. Rogers.....	J. S. Shoup, Miss B. M. Nelson, N. E. Palmer and J. H. Vierth.....
98	Worth.....	W. F. Barclay.....	H. T. Toye.....
99	Wright.....	J. Q. Hanna.....	J. M. Overbaugh, Rose Whited and Mattie Melrose .....

## ABSTRACT [E]—CONTINUED.

## NORMAL INSTITUTES.

## LECTURERS.

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- I. Y. Aitcheson, J. W. Akers, J. Allender, M. F. Arey.  
 J. S. Beach, H. Belden, A. J. Baker, W. F. Barclay, M. Benham, C. P. Bowman, J. Baldwin, A. Babcock, J. H. Blodgett, S. J. Buck, E. Baker, H. S. Boltwood, E. A. Benson, W. Beattie, Mr. Bennett, D. M. Baker, Henry Ward Beecher.  
 C. W. von Coelln, A. E. Clarendon, G. T. Carpenter, C. C. Carpenter, W. E. Crosby, Rev. Cheatham, Mrs. R. S. Child, S. Calvin, Dr. Clayton, Mrs. Collins, C. H. Clemmer, G. W. Cullison, J. C. W. Cox, A. H. Chase, M. Cooper.  
 M. Downing, C. M. Des Islets, W. F. Davis.  
 R. M. Ewart, W. D. Evans, H. A. Eberle, A. Earthman, W. Emons, E. R. Eldridge.  
 H. H. Freer, Mrs. H. I. Farnum, S. N. Fellows, W. H. Fannon.  
 M. Gibney, J. C. Gilchrist, J. F. Grawe.  
 W. G. Hillman, Dr. Hale, J. Harrison, Rev. Hughs, J. J. Hamilton, A. A. Harkness, Miss F. Hollister, P. Hill, H. C. Hollingsworth, G. S. Houghton, Miss Dr. Hanna, S. S. Hunting, F. Harris, J. M. Hull.  
 S. W. Ingham.  
 M. H. Jones, Rev. Jenkins.  
 E. B. Kephart, S. Kuyper, G. J. Kollen, J. Kolrood, J. C. Knapp.  
 G. W. Lloyd, J. Lake, S. P. Leland, N. R. Leonard.  
 G. F. Magoun, J. L. Murray, Ella J. Meade, C. A. Marshall, T. H. McBride, I. W. Myers, J. M. Mehan, D. D. Miracle, G. S. Massey, L. A. Merriam, N. McLeod, Rev. Mitchell, Mrs. W. D. McCue, L. Miles, J. S. McSparron.  
 J. A. Nash, J. N. Nash, J. North.  
 A. W. Osborne, A. N. Ozias.  
 W. H. Pratt, J. L. Pickard, J. Piper, L. F. Parker, J. J. Pollard, D. A. W. Perkins, W. P. Payne.  
 H. Russell, Dr. Reynolds, G. F. Richardson, Mr. Ryman, T. C. Ransom, S. Rogers.  
 H. Sabin, H. H. Shaver, C. H. Seymour, S. G. Smith, T. H. Smith, J. P. Sanford, J. T. Smith, W. M. Sparr, T. J. Simmons, F. McK. Stewart, W. Sturgeon, J. C. Scott, Rev. Southworth, Mr. Spinder, J. S. Sanford, R. Saunderson.  
 W. E. Traer, M. L. Temple, E. O. Towne, Miss K. N. Tupper, H. H. Trembell.  
 J. R. Upton.  
 I. A. Ward, H. E. Wing, A. Weaver, J. Wernli, W. F. Wentworth, A. S. Welch, W. M. Wilcox, J. N. Weaver, R. H. Whipple, W. B. Waterbury, Miss M. Wright, E. Winans, J. Wheeler, L. T. Weld, W. A. Waterman, J. M. Webb, G. S. Wedgwood, Mr. Mowatt, R. M. Wright.

# STATE UNIVERSITY OF IOWA.

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This institution is organized into four departments: COLLEGIATE, LAW, MEDICAL and HOMEOPATHIC MEDICAL.

Its graduates number 1086: 397 from the Collegiate, 542 from the Law and 147 from the Medical department.

The Collegiate graduates engage largely in teaching, thus making the University a live factor in the educational work of the state. Of 142 principals and superintendents reported as having been educated in colleges and universities, nearly twenty seven per cent. are representatives of the State University. The number from the State University exceeds the number from all the other colleges and universities of Iowa.

The number of students enrolled thus far this year is as follows:

## COLLEGIATE DEPARTMENT:

Seniors.....	20
Juniors.....	60
Sophomores.....	44
Freshmen.....	75
Sub-Freshmen.....	65
Irregulars.....	34
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Total.....	284
Law Department.....	110
Medical Department.....	90
Homeopathic Medical Department.....	32
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Total.. ..	516

This is a larger number than has ever been enrolled before in the same classes.

In the Collegiate department and Sub-Freshman class, two students from each county of Iowa, who are recommended by the superintendent, clerk of the courts, and auditor of the county of their residence, all Iowa soldiers, and orphans of Iowa soldiers, are admitted on payment of only an incidental fee of \$3.33 per term.

For further information, address Prof. N. B. Leonard, Dean of the Collegiate Faculty; W. G. Hammond, LL.D., Chancellor of the Law Department; Dr. W. F. Peck, Dean of the Medical Faculty; Dr. A. C. Cowperthwait, Dean of the Homeopathic Medical Faculty; or J. L. Pickard, President of the Iowa State University.

# CALENDAR.

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## UNIVERSITY YEAR, 1878-9.

1878.

September 10, Examinations for admission, Tuesday.

September 11, First Term begins, Wednesday.

October 9, Lecture course in Medical Department begins,  
Wednesday.

December 20, First Term ends, Friday.

## WINTER VACATION.

1879.

January 6, Second Term begins, Monday.

March 5, Medical Term ends and Graduation of Medical  
Class, Wednesday.

March 25, Second Term ends, Tuesday.

## SPRING VACATION.

April 2, Third Term begins, Wednesday.

June 15, Baccalaureate Address, Sunday.

June 16, Anniversary of Literary Societies, 8 P. M., Monday.

June 17, Graduation of Law Class, 9 A. M., Tuesday.

June 17, Law Oration, 8 P. M., Tuesday.

June 18, University Oration, 10 A. M., Wednesday.

June 18, Meeting of the Alumni Association, 8 P. M.,  
Wednesday.

June 19, Collegiate Commencement, 9 A. M., Thursday.

## SUMMER VACATION.

September 17, Fall Term begins, Wednesday.

*NOTE.—The terms of the Law Department begin and end with  
those of the Collegiate.*

# IOWA STATE NORMAL SCHOOL, CEDAR FALLS, IOWA.

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The attendance by terms at the I. S. N. S., for the last school year was as follows:—For the Fall Term, commencing September 3d, 1877, and continuing sixteen weeks, 173; Winter Term, commencing January 7th, 1878, and continuing twelve weeks, 133; Spring Term, commencing April 8th, 1878, and continuing twelve weeks, 110. The number of different students for the entire year, 237. The average number per term was 139. The number in the Junior Elementary class (first year in course of study) was, Ladies, 124; Gentlemen, 69—total, 193. The number in the Senior Elementary class (second year in course of study) was, Ladies, 28; Gentlemen, 12—total, 40. Of these, 21 were irregular. The number in the Senior Didactic (third year in course of study) was, Ladies, 1; Gentlemen, 3—total 4.

The total number of counties represented in this State was 53; in other States, 2.

The average age of students of both sexes was 21. The number entering the school who had never taught was 88. The average number of terms taught, for each student who had taught, was  $4\frac{1}{2}$ . Many teachers of extended experience have resorted to the school, yet the greater number is of those who have taught but little or none at all.

The attendance for the Fall Term of 1878 is as follows: Ladies, 124; Gentlemen, 52—total, 176. The number of counties represented is 49.

Besides rooms for educational purposes, the Normal School buildings can accommodate about One Hundred and Twenty Boarders. The price of boarding is the actual cost, estimated for the next year as follows: Board, per week, \$2.65; Rooms, Heat and Light, for the Spring and Fall Terms, per week, \$0.50; Winter Term, per week, \$0.75. Total cost, per week, Spring and Fall Terms, \$3.15; Total cost, per week, Winter Term, \$3.45.

**NORMAL DEPARTMENT.**—The entire course is offered to teachers, *free of tuition*.

**INCIDENTALS.**—For Heating and care of School-Rooms, per week, 25 cents; For Washing, per dozen, 60 cents.

Correspondence in regard to the school, may be addressed to "Normal School, Cedar Falls, Iowa," or to the Principal or Steward, at Cedar Falls.

## FACULTY.

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J. C. GILCHRIST, A. M., PRINCIPAL,  
*Prof. of Mental Philosophy, Moral Philosophy, and Didactics.*

M. W. BARTLETT, A. M.,  
*Prof. of Mathematics and Natural Science.*

D. S. WRIGHT, A. M.,  
*Prof. of English Language and Literature.*

MISS S. LAURA ENSIGN, BACH. DID.,  
*Teacher of Geography and History.*

W. N. HULL,  
*Prof. of Elocution, Drawing, and Penmanship.*

J. MONROE HOBRON,  
*Prof. of Vocal and Instrumental Music.*

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## CALENDAR FOR 1878 9.

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The Scholastic Year of Forty Weeks is divided into Three Terms.

The First Term of Sixteen Weeks begins Thursday, September 5th, 1878, and closes December 20th, 1878. Semi-Annual Meeting of the Board of Directors, Thursday, December 19th. Examination at close of the term.

### VACATION OF TWO WEEKS.

The Second Term of Twelve Weeks begins Monday, January 6th, 1879, and closes Friday, March 28th, 1879.

### VACATION OF ONE WEEK.

The Third Term of Twelve Weeks begins on Monday, April, 7th, 1879, and closes Thursday, June 26th, 1879. Examinations of Graduating Class by State Committee, Thursday and Friday, June 19th and 20th. Examinations during the last week of the term. Annual Meeting of the Board of Directors, Wednesday, June 25th. Commencement Exercises, Thursday, June 26th.

### VACATION OF TEN WEEKS.

## LIST OF COUNTY SUPERINTENDENTS.

FOR THE YEAR 1879.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Adair*	M. W. Haver.....	Greenfield .....
Adams .....	T. L. Maxwell.....	Corning .....
Allamakee.....	J. Loughran.....	Waukon .....
Appanoose.....	D. R. Guernsey.....	Centerville.....
Audubon .....	A. K. Brainard.....	Exira .....
Benton* .....	Miss S. Blackburn.....	Vinton .....
Black Hawk*.....	J. S. George.....	Waterloo .....
Boone .....	G. W. Lloyd.....	Moingona.....
Bremer .....	D. C. Chamberlin.....	Waverly .....
Buchanan* .....	W. E. Parker.....	Independence.....
Buena Vista.....	A. J. White.....	Sulphur Springs.....
Butler* .....	J. W. Stewart.....	Shell Rock .....
Calhoun* .....	A. Calhoun.....	Lake City.....
Carroll .....	H. W. Bean.....	Glidden .....
Cass* .....	H. A. Disbrow.....	Atlantic .....
Cedar* .....	Miss E. E. Frink.....	Tipton .....
Cerro Gordo*.....	M. H. Kling.....	Mason City.....
Cherokee .....	W. F. Rose.....	Cherokee.....
Chickasaw* .....	W. D. Collins.....	New Hampton.....
Clarke .....	J. Molesworth.....	Osceola.....
Clay .....	S. Gillespie.....	Spencer .....
Clayton .....	P. W. McClelland.....	Elkader.....
Clinton.....	M. J. Wilcox.....	Lyons .....
Crawford.....	Z. T. Hawk.....	Denison .....
Dallas* .....	A. Dilley.....	Adel.....
Davis* .....	I. F. Jenkins.....	Bloomfield .....
Decatur* .....	Miss J. Kellogg.....	Leon.....
Delaware* .....	R. M. Ewart.....	Manchester.....
Des Moines.....	J. Paisley.....	Burlington.....
Dickinson* .....	H. C. Crary.....	Milford .....
Dubuque* .....	N. W. Boyes.....	Dubuque.....
Emmet* .....	F. Davey.....	Estherville.....
Fayette .....	G. W. Fitch.....	Hawk-Eye .....
Floyd .....	G. H. Nichols.....	Marble Rock .....
Franklin .....	I. W. Myers.....	Hampton.....
Fremont* .....	T. J. Brant.....	Sidney.....
Greene* .....	H. A. Turrill.....	Jefferson .....
Grundy.....	G. T. Cowgill.....	Grundy Center.....
Guthrie* .....	G. C. Miller.....	Guthrie Center.....
Hamilton.....	H. H. Johnson.....	Williams .....
Hancock .....	M. L. Fuller.....	Upper Grove.....
Hardin* .....	L. S. McCoy.....	Eldora.....
Harrison .....	J. D. Hornby.....	Magnolia .....
Henry* .....	J. W. Palm.....	Mt. Pleasant.....
Howard .....	W. H. Brocksome.....	Lime Springs.....
Humboldt .....	J. A. Marvin.....	Humboldt .....
Ida* .....	T. S. Snell.....	Ida .....
Iowa .....	D. Hughes.....	Marengo .....
Jackson .....	W. H. Fort.....	Maquoketa.....

\* Re-elected.

## LIST OF COUNTY SUPERINTENDENTS—CONTINUED.

FOR THE YEAR 1879.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Jasper .....	Mrs. M. A. Mayfield .....	Newton .....
Jefferson .....	J. Grinstead .....	Fairfield .....
Johnson* .....	J. M. Curry .....	Iowa City ... ..
Jones* .....	O. E. Aldrich .....	Wyoming .....
Keokuk* .....	H. D. Todd .....	Sigourney .....
Kossuth .....	A. A. Crose .....	Algona .....
Lee* .....	W. J. Medes .....	Keokuk .. .....
Linn* .....	E. Johnston .....	Mt. Vernon .....
Louisa .....	D. Helmick .....	Columbus Junction.
Lucas .....	L. A. Culbertson .....	Chariton .....
Lyon .....	H. F. Green .....	Rock Rapids .....
Madison* .....	H. W. Hardy .....	Winterset .....
Mahaska .....	J. C. Williams .....	Oskaloosa .....
Marion* .....	A. Yetter .....	Knoxville .....
Marshall .....	W. W. Speer .....	Marshalltown .....
Mills .....	W. H. Wright .....	Pacific City .....
Mitchell* .....	G. D. Pattengill .....	Osage .....
Monona* .....	C. N. Lyman .....	Onawa .....
Monroe .....	A. J. Casaday .....	Albia .....
Montgomery* .....	W. P. Pattison .....	Red Oak .....
Muscatine* .....	R. W. Leverich .....	Muscatine .....
O'Brien .....	H. Day .....	Primmar .....
Osceola .....	Mrs. W. L. Parker .....	Sibley .....
Page* .....	E. Miller .....	Clarinda .....
Palo Alto .....	Le Roy Grout .....	Emmetsburg .....
Plymouth .....	F. W. Guernsey .....	Le Mars .....
Pocahontas .....	D. Miller .....	Pocahontas Center.
Polk .....	J. H. Koons .....	East Des Moines .....
Pottawattamie* .....	F. C. Childs .....	Council Bluffs .....
Poweshiek* .....	W. R. Akers .....	Malcom .....
Ringgold* .....	W. J. Work .....	Mt. Ayr .....
Sac .....	J. Darling .....	Sac City .....
Scott* .....	C. H. Clemmer .....	Davenport .....
Shelby .....	M. D. Bridgman .....	Harlan .....
Sioux* .....	S. Kuyper .....	Orange City .....
Story .....	L. B. Baughman .....	Nevada .....
Tama* .....	H. A. Brown .....	Toledo .....
Taylor* .....	J. B. Owens .....	Bedford .....
Union .....	J. D. Thomas .....	Afton .....
Van Buren* .....	J. W. Rowley .....	Utica .....
Wapello .....	W. A. McIntire .....	Ottumwa .....
Warren* .....	Miss E. S. Cooke .....	Indianola .....
Washington .....	Miss N. J. Springer .....	Washington .....
Wayne .....	J. H. Ware .....	Corydon .....
Webster* .....	J. A. Adams .....	Fort Dodge .....
Winnebago* .....	W. A. Chapman .....	Lake Mills .....
Winneshiek* .....	N. Kessey .....	Decorah .....
Woodbury .....	S. Rogers .....	Sioux City .....
Worth* .....	G. H. Whitcomb .....	Kensett .....
Wright* .....	J. Q. Hanna .....	Goldfield .....

\*Re-elected.



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1879.

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## STATEMENT

*Of the Amount of Interest on the Permanent School Fund Apportioned during the Years 1878 and 1879.*

COUNTY.	Interest ap- portioned March, 1878.	Interest ap- portioned September, 1878.	Total appor- tionment for 1878.	Interest ap- portioned March, 1879.	Interest ap- portioned September, 1879.	Total appor- tionment for 1879.
Adair .....	\$ 967.25	\$ 967.25	\$ 1,934.50	\$ 920.23	\$ 1,000.25	\$ 1,920.48
Adams .....	953.75	953.75	1,907.50	917.70	997.50	1,915.20
Allamakee .....	2,063.75	2,063.75	4,127.50	1,906.24	2,072.00	3,978.24
Appanoose .....	1,772.25	1,772.25	3,544.50	1,513.86	1,645.50	3,159.36
Audubon .....	350.75	350.75	701.50	385.25	418.75	804.00
Benton .....	2,347.00	2,347.00	4,694.00	2,139.92	2,326.00	4,465.92
Black Hawk .....	2,140.75	2,140.75	4,281.50	2,018.94	2,194.50	4,213.44
Boone .....	1,699.75	1,699.75	3,399.50	1,704.30	1,852.50	3,556.80
Bremer .....	1,391.00	1,391.00	2,782.00	1,269.60	1,380.00	3,649.60
Buchanan .....	1,750.25	1,750.25	3,500.50	1,611.15	1,751.25	3,362.40
Buena Vista .....	435.25	435.25	870.50	465.06	505.50	970.56
Butler .....	1,275.50	1,275.50	2,551.00	1,168.86	1,270.50	2,439.36
Calhoun .....	386.75	386.75	773.50	378.81	411.75	790.56
Carroll .....	772.25	772.25	1,544.50	754.63	820.25	1,574.88
Cass .....	1,183.25	1,183.25	2,366.50	1,294.21	1,406.75	2,700.96
Cedar .....	1,806.50	1,806.50	3,613.00	1,604.02	1,743.50	3,347.52
Cerro Gordo .....	787.00	787.00	1,574.00	816.27	887.25	1,703.52
Cherokee .....	496.75	496.75	993.50	520.72	566.00	1,086.72
Chickasaw .....	1,334.50	1,334.50	2,669.00	1,267.99	1,378.25	2,646.24
Clarke .....	1,066.25	1,066.25	2,132.50	989.69	1,075.75	2,065.44
Clay .....	283.25	283.25	566.50	258.06	280.50	538.56
Clayton .....	2,802.25	2,802.25	5,604.50	2,545.18	2,766.50	5,311.68
Clinton .....	3,370.00	3,370.00	6,740.00	3,085.22	3,353.50	6,438.72
Crawford .....	774.00	774.00	1,548.00	773.95	841.25	1,615.20
Dallas .....	1,636.75	1,636.75	3,273.50	1,492.70	1,622.50	3,115.20
Davis .....	1,587.75	1,587.75	3,175.50	1,435.89	1,560.75	2,996.64
Decatur .....	1,483.50	1,483.50	2,967.00	1,300.88	1,414.00	2,714.88
Delaware .....	1,589.75	1,589.75	3,179.50	1,422.55	1,546.25	2,968.80
Des Moines .....	3,016.00	3,016.00	6,032.00	2,835.90	3,082.50	5,918.40
Dickinson .....	152.00	152.00	304.00	167.21	181.75	348.96
Dubuque .....	4,514.50	4,514.50	9,029.00	4,148.05	4,508.75	8,656.80
Emmet .....	139.25	139.25	278.50	142.14	154.50	296.64
Fayette .....	2,216.25	2,216.25	4,432.50	2,031.59	2,208.25	4,239.84
Floyd .....	1,337.00	1,337.00	2,674.00	1,287.77	1,399.75	2,687.52
Franklin .....	756.00	756.00	1,512.00	762.22	828.50	1,590.72
Fremont .....	1,483.75	1,483.75	2,967.50	1,348.26	1,465.50	2,813.76
Greene .....	906.50	906.50	1,812.00	898.15	976.25	1,874.40
Grundy .....	887.25	887.25	1,774.50	926.44	1,007.00	1,933.44
Guthrie .....	1,112.75	1,112.75	2,225.50	1,026.49	1,115.75	2,142.24
Hamilton .....	636.50	636.50	1,273.00	814.66	885.50	1,700.16
Hancock .....	211.00	211.00	422.00	209.99	228.25	438.24
Hardin .....	1,707.75	1,707.75	3,415.50	1,584.01	1,721.75	3,305.76
Harrison .....	1,317.75	1,317.75	2,635.50	1,249.82	1,358.50	2,608.32
Henry .....	2,044.50	2,044.50	4,089.00	1,862.54	2,024.50	3,887.04
Howard .....	915.50	915.50	1,831.00	907.35	986.25	1,893.60
Humboldt .....	383.50	383.50	767.00	355.35	386.25	741.60
Ida .....	135.00	135.00	270.00	215.28	234.00	449.28
Iowa .....	1,754.50	1,754.50	3,509.00	1,641.97	1,784.75	3,426.72
Jackson .....	2,291.25	2,291.25	4,582.50	2,058.50	2,237.50	4,296.00
Jasper .....	2,549.50	2,549.50	5,099.00	2,323.23	2,525.25	4,848.48

## STATEMENT—CONTINUED.

COUNTY.	Interest ap- portioned March, 1878.	Interest ap- portioned September, 1878.	Total appor- tionment for 1878.	Interest ap- portioned March, 1879.	Interest ap- portioned September, 1879.	Total appor- tionment for 1879.
Jefferson .....	\$ 1,663.25	\$ 1,663.25	\$ 3,326.50	\$ 1,489.48	\$ 1,619.00	\$ 3,108.48
Johnson .....	2,709.75	2,709.75	5,419.50	2,323.69	2,525.75	4,849.44
Jones .....	2,081.00	2,081.00	4,162.00	1,982.14	2,154.50	4,136.64
Keokuk .....	2,065.25	2,065.25	4,130.50	1,859.55	2,021.25	3,880.80
Kossuth .....	425.75	425.75	851.50	525.09	570.75	1,095.84
Lee .....	3,617.50	3,617.50	7,235.00	3,186.19	3,463.25	6,649.44
Linn .....	3,332.50	3,332.50	6,665.00	3,049.11	3,314.25	6,363.36
Louisa .....	1,261.25	1,261.25	2,522.50	1,118.03	1,215.25	2,333.28
Lucas .....	1,258.25	1,258.25	2,516.50	1,145.17	1,244.75	2,389.92
Lyon .....	144.25	144.25	288.50	135.01	146.75	281.76
Madison .....	1,711.00	1,711.00	3,422.00	1,548.36	1,683.00	3,231.36
Mahaska .....	2,448.00	2,448.00	4,896.00	2,156.02	2,343.50	4,499.52
Marion .....	2,671.00	2,671.00	5,342.00	2,409.48	2,619.00	5,028.48
Marshall .....	2,032.50	2,032.50	4,065.00	1,899.11	2,004.25	3,903.36
Mills .....	1,188.00	1,188.00	2,376.00	1,116.88	1,214.00	2,330.88
Mitchell .....	1,183.25	1,183.25	2,366.50	1,122.63	1,220.25	2,342.88
Monona .....	690.50	690.50	1,381.00	656.19	713.25	1,369.44
Monroe .....	1,362.00	1,362.00	2,724.00	1,147.93	1,247.75	2,395.68
Montgomery .....	1,108.50	1,108.50	2,217.00	1,086.52	1,181.00	2,267.52
Muscatine .....	2,077.50	2,077.50	4,155.00	1,894.05	2,058.75	3,952.80
O'Brien .....	230.00	230.00	460.00	235.75	256.25	492.00
Osceola .....	143.50	143.50	287.00	158.47	172.25	330.72
Page .....	1,546.50	1,546.50	3,093.00	1,427.84	1,552.00	2,979.84
Palo Alto .....	325.00	325.00	650.00	322.92	351.00	673.92
Plymouth .....	583.75	583.75	1,167.50	590.87	642.25	1,233.12
Pocahontas .....	254.00	254.00	508.00	273.01	296.75	569.76
Polk .....	3,275.50	3,275.50	6,551.00	3,113.74	3,384.50	6,498.24
Pottawattamie .....	2,411.25	2,411.25	4,822.50	2,273.09	2,470.75	4,743.84
Poweshiek .....	1,816.00	1,816.00	3,632.00	1,681.39	1,773.25	3,454.64
Ringgold .....	1,006.25	1,006.25	2,012.50	963.93	1,047.75	2,011.68
Sac .....	470.00	470.00	940.00	510.83	555.25	1,066.08
Scott .....	3,807.25	3,807.25	7,614.50	3,569.37	3,879.75	7,449.12
Shelby .....	792.75	792.75	1,585.50	796.95	866.25	1,663.20
Sioux .....	397.25	397.25	794.50	388.70	422.50	811.20
Story .....	1,504.25	1,504.25	3,008.50	1,336.99	1,453.25	2,790.24
Tama .....	1,838.25	1,838.25	3,676.50	1,697.17	1,844.75	3,541.92
Taylor .....	1,295.00	1,295.00	2,590.00	1,301.34	1,414.50	2,715.84
Union .....	1,129.50	1,129.50	2,259.00	1,076.40	1,170.00	2,246.40
Van Buren .....	1,611.00	1,611.00	3,222.00	1,513.63	1,645.25	3,158.88
Wapello .....	2,162.00	2,162.00	4,324.00	1,967.88	2,139.00	4,106.88
Warren .....	1,903.00	1,903.00	3,806.00	1,760.42	1,913.50	3,673.92
Washington .....	2,041.75	2,041.75	4,083.50	1,838.85	1,998.75	3,837.60
Wayne .....	1,568.00	1,568.00	3,136.00	1,371.95	1,491.25	2,863.20
Webster .....	1,309.00	1,309.00	2,618.00	1,308.24	1,422.00	2,730.24
Winnebago .....	381.25	381.25	762.50	344.08	374.00	718.08
Winneshiek .....	2,322.75	2,322.75	4,645.50	2,169.13	2,357.75	4,526.88
Woodbury .....	928.75	928.75	1,857.50	873.31	949.25	1,822.56
Worth .....	564.75	564.75	1,129.50	559.82	608.50	1,168.32
Wright .....	381.50	381.50	763.00	369.38	401.50	770.88
Totals .....	\$ 142,006.50	\$ 142,006.50	\$ 284,013.00	\$ 182,354.88	\$ 143,864.00	\$ 276,218.88

## ABSTRACT [A]

## SCHOOL.

	DISTRICTS.			SCHOOLS.			TEACHERS.			
	District town-ships.	Independent districts.	Sub-districts.	Ungraded.	Rooms in graded.	Av. duration, in months.	Number employed.		Av. monthly compensation.	
							Males.	Females.	Males.	Females.
	15	10	114	117	7	7.30	100	140	\$ 29.42	\$ 26.20
	8	27	64	91	10	7.10	61	127	28.69	24.10
	9	70	59	126	19	7.20	51	171	22.40	21.49
4 Appanoose.....	13	29	93	123	18	6.40	81	124	27.83	22.52
5 Audubon.....	12	2	54	57	...	7.40	51	58	29.69	29.44
6 Benton.....	10	98	87	179	29	7.31	137	220	30.28	25.50
7 Black Hawk....	11	56	84	138	19	7.55	98	194	31.43	26.71
8 Boone.....	16	11	133	136	24	7.10	97	182	29.50	25.00
9 Bremer.....	6	59	44	100	19	7.40	58	144	27.69	22.60
10 Buchanan.....	9	62	75	136	22	7.56	78	202	28.72	23.88
11 Buena Vista....	17	8	69	78	10	6.70	50	88	29.03	26.29
12 Butler.....	11	45	81	119	23	7.40	81	160	30.71	26.44
13 Calhoun.....	14	...	68	73	3	6.80	50	68	29.36	27.58
14 Carroll.....	15	9	90	109	7	6.90	102	83	29.93	27.07
15 Cass.....	16	3	134	132	13	7.70	97	176	31.43	28.79
16 Cedar.....	12	43	96	132	28	7.55	97	181	34.87	27.72
17 Cerro Gordo....	13	4	88	101	21	7.40	63	157	32.48	26.62
18 Cherokee.....	16	1	83	86	5	6.90	51	100	29.70	27.12
19 Chickasaw.....	5	60	51	108	19	7.10	73	143	29.23	22.57
20 Clarke.....	9	25	77	98	13	6.86	61	124	26.87	27.00
21 Clay.....	11	1	60	61	2	6.30	38	...	25.55	22.15
22 Clayton.....	20	33	135	159	39	7.10	110	190	35.39	27.47
23 Clinton.....	19	35	133	167	59	8.14	84	199	36.69	32.35
24 Crawford.....	20	2	100	102	12	7.20	72	107	33.54	30.39
25 Dallas.....	13	29	112	135	32	7.10	114	182	31.75	28.15
26 Davis.....	6	65	36	95	18	6.50	11	109	27.11	20.50
27 Decatur.....	9	47	59	92	10	7.30	84	117	27.40	21.23
28 Delaware.....	14	23	108	123	21	7.60	69	171	32.33	24.64
29 Des Moines.....	6	58	28	80	30	8.50	81	132	45.75	33.48
30 Dickinson.....	11	3	26	33	...	6.20	17	111	27.32	23.68
31 Dubuque.....	10	50	61	114	77	8.70	63	180	50.15	29.12
32 Emmet.....	8	1	21	25	2	6.50	19	23	31.57	25.61
33 Fayette.....	12	76	98	163	28	7.10	98	243	26.67	21.07
34 Floyd.....	11	15	94	102	24	7.50	54	156	34.00	27.23
35 Franklin.....	11	33	67	96	7	7.45	56	121	32.07	25.52
36 Fremont.....	11	16	96	107	22	7.70	80	118	34.14	27.01
37 Greene.....	14	11	107	119	10	7.20	73	158	29.22	24.92
38 Grundy.....	12	21	103	124	4	7.50	59	141	29.92	26.30
39 Guthrie.....	14	18	108	121	18	6.80	100	132	31.00	28.60
40 Hamilton.....	12	16	76	94	13	7.30	53	113	28.15	25.47
41 Hancock.....	12	...	52	49	...	6.98	16	61	33.03	29.20
42 Hardin.....	9	58	67	124	25	7.10	93	174	32.82	26.37
43 Harrison.....	15	32	83	115	18	7.60	97	138	35.65	30.58
44 Henry.....	4	77	33	100	26	7.80	75	162	30.61	25.80
45 Howard.....	11	10	73	81	11	7.20	50	107	31.94	25.10
46 Humboldt.....	10	7	49	65	...	6.64	39	89	26.47	27.06
47 Ida.....	11	1	35	42	...	6.90	22	47	33.72	29.26
48 Iowa.....	10	63	77	139	23	7.20	106	169	31.78	24.00
49 Jackson.....	13	45	96	136	34	7.80	94	174	30.53	22.85
50 Jasper.....	17	28	111	168	36	7.46	136	247	31.34	27.00

REPORTS FOR 1879.

STATISTICS.

## ABSTRACT [A]—CONTINUED.

## SCHOOL

COUNTY.	DISTRICTS.			SCHOOLS.			TEACHERS.			
	District town-ships.	Independent districts.	Sub-districts.	Ungraded.	Rooms in graded.	Av. duration, in months.	Number employed.		Av. monthly compensation.	
							Males.	Females.	Males.	Females.
51 Jefferson.....	9	30	68	91	20	7.30	82	121	\$29.76	\$ 24.34
52 Johnson.....	15	48	115	158	34	7.60	88	238	30.30	25.17
53 Jones.....	9	65	66	127	29	7.40	97	187	30.88	22.00
54 Keokuk.....	2	114	22	125	31	7.10	119	155	28.19	21.87
55 Kossuth.....	8	1	75	89	5	7.30	66	83	28.20	25.15
56 Lee.....	8	65	47	110	65	7.30	83	174	36.05	27.84
57 Linn.....	12	64	118	184	58	7.40	122	290	30.57	25.99
58 Louisa.....	9	27	53	72	25	7.80	58	123	32.70	25.78
59 Lucas.....	4	60	31	89	14	6.90	63	110	27.90	23.55
60 Lyon.....	9	3	29	37	2	6.00	11	42	34.37	28.71
61 Madison.....	12	23	99	130	16	7.00	120	157	29.78	26.92
62 Mahaska.....	8	74	62	135	37	7.50	89	210	37.53	26.73
63 Marion.....	4	112	24	136	36	7.12	125	148	28.37	22.00
64 Marshall.....	12	53	88	137	31	7.80	126	161	34.76	33.43
65 Mills.....	4	58	20	74	18	7.60	56	103	36.09	30.88
66 Mitchell.....	8	45	51	92	20	7.30	65	123	32.80	25.04
67 Monona.....	18	1	81	86	6	7.40	64	96	31.12	29.34
68 Monroe.....	8	33	62	90	9	6.60	54	117	28.63	22.18
69 Montgomery...	10	21	81	97	15	7.10	61	123	31.93	27.13
70 Muscatine.....	10	29	67	91	46	8.60	74	162	37.83	24.49
71 O'Brien.....	11	1	58	58	4	7.10	40	59	29.10	26.18
72 Osceola.....	8	2	36	39	2	6.30	29	35	24.70	24.90
73 Page.....	13	45	82	122	25	7.50	89	167	33.81	28.40
74 Palo Alto.....	14	1	58	62	2	6.90	39	73	29.80	25.75
75 Plymouth.....	19	1	82	90	6	7.40	64	89	33.00	29.95
76 Pocahontas....	13	8	56	64	...	7.00	39	77	27.74	25.45
77 Polk.....	13	55	94	144	76	7.55	126	224	36.50	34.68
78 Pottawattamie	26	3	193	184	34	7.80	143	231	34.61	32.70
79 Poweshiek.....	14	24	116	135	25	7.70	99	187	32.78	27.16
80 Ringgold.....	12	31	88	116	4	6.30	71	146	26.80	24.05
81 Sac.....	16	1	85	82	7	6.60	48	99	28.38	25.78
82 Scott.....	13	26	79	104	98	9.20	109	150	48.73	42.75
83 Shelby.....	16	2	99	103	2	7.20	76	101	31.47	29.93
84 Sioux.....	13	1	71	70	...	7.30	57	51	31.33	27.74
85 Story.....	14	22	110	124	16	7.20	119	141	27.89	23.25
86 Tama.....	12	77	92	164	33	7.45	123	239	31.70	26.48
87 Taylor.....	14	20	101	116	15	7.27	96	134	30.22	26.96
88 Union.....	10	20	91	106	22	7.30	91	139	28.70	26.11
89 Van Buren....	8	45	65	105	21	7.00	86	156	31.10	22.05
90 Wapello.....	8	48	50	89	53	7.50	90	128	34.98	27.89
91 Warren.....	6	88	39	129	23	6.70	105	170	32.51	24.80
92 Washington...	6	82	48	124	27	7.20	88	203	30.00	23.05
93 Wayne.....	13	30	85	106	14	7.00	104	126	28.00	22.31
94 Webster.....	19	21	98	125	14	6.80	64	166	28.36	24.65
95 Winnebago....	4	1	27	31	4	7.00	27	28	27.48	25.67
96 Winneshiek...	15	37	98	130	25	7.15	70	132	33.67	24.90
97 Woodbury.....	15	23	64	95	24	8.00	70	138	36.17	30.58
98 Worth.....	12	1	66	63	3	7.20	45	75	29.80	24.82
99 Wright.....	11	1	66	66	2	6.77	46	78	31.44	27.98
Total.....	1140	3139	7543	10457	2083	7.35	7573	13579	\$31.71	\$ 26.40

## REPORTS FOR 1879.

## STATISTICS.

PUPILS.					SCHOOL-HOUSES.					Value of apparatus.	No. of volumes in Library.
Between the ages of 5 and 21 y'rs		Enrolled in public schools	Total average attendance.	Average cost of tuition per no. per pupil.	NUMBER.				Value.		
Males.	Females.				Frame.	Brick.	Stone.	Log.			
3248	3307	4893	3203	\$ 1.03	88	5	....	..	\$ 93,120	\$ 468	226
5180	5070	7319	3864	1.49	150	16	3	..	103,645	1,382	70
4360	4183	6275	3670	1.15	118	8	6	3	108,550	1,787	96
4107	3851	6135	3647	1.11	126	8	3	..	100,275	2,009	37
1269	1364	1981	891	3.21	75	....	....	..	41,058	2,137	1119
6568	6583	8107	5358	1.20	77	33	10	4	239,365	819	150
6538	6606	9508	6650	1.21	168	26	2	..	224,135	1,558	202
2403	2292	3797	2132	1.40	71	4	1	..	66,500	759	8
2520	2514	3968	2338	1.31	91	2	....	..	63,316	1,389	....
354	293	468	337	4.00	32	....	....	1	27,980	1,738	....
3540	3186	5568	3531	1.29	108	3	21	..	114,885	1,810	295
4693	4400	7492	4396	1.22	126	11	....	..	173,605	1,684	35
5103	4866	7974	4739	1.97	134	9	....	1	123,940	1,178	76
4238	3962	6457	4085	1.61	130	15	....	..	133,900	2,728	32
2576	2387	3622	2099	1.58	73	8	....	..	67,413	2,023	21
2393	2346	3642	2160	1.60	81	10	3	2	81,965	2,586	30
1515	1884	2332	1368	2.13	80	2	....	2	54,065	2,191	1223
2678	2474	3853	2190	1.30	88	4	1	1	64,270	1,494	76
2549	2300	3632	2456	1.41	95	4	1	..	80,500	515	9
4034	3897	5726	3890	1.26	86	13	....	..	191,300	1,798	206
629	560	944	652	2.23	46	6	....	..	27,120	416	....
357	355	545	353	3.00	41	....	....	..	8,205	176	2
3439	3108	5040	3173	1.50	121	4	....	..	111,101	2,076	392
736	685	1190	634	2.80	60	....	....	..	26,613	1,042	423
1419	1356	2166	1168	2.93	83	1	....	..	49,688	2,470	35
630	636	1027	548	2.95	60	1	1	..	25,180	1,478	114
6905	6694	10441	6253	1.46	148	11	....	..	292,527	1,570	251
5562	4950	7089	3871	2.12	171	24	1	..	208,507	5,995	1263
3629	3315	5260	3300	1.58	140	....	....	..	97,205	1,262	108
2185	2015	3460	2078	1.70	116	1	....	..	50,470	796	19
1259	1213	1799	1175	1.98	80	4	....	..	43,007	666	21
7811	7860	9772	6129	1.70	102	11	7	..	410,700	2,558	181
1890	1683	2788	1669	2.05	98	3	....	..	49,288	2,641	141
1032	917	1302	858	2.49	71	....	....	..	27,933	2,951	792
3163	2968	4947	2813	1.38	117	13	....	..	88,045	856	335
3807	3459	6052	3641	1.66	164	6	3	1	134,175	731	55
2886	2660	4243	2800	1.52	99	1	1	1	78,365	2,005	33
2605	2496	3944	2775	1.49	108	3	....	..	84,275	1,331	30
3138	2943	5066	3270	1.07	86	18	3	..	98,275	414	25
4323	4186	6096	3638	1.36	85	13	1	..	163,935	1,251	340
3966	3473	6184	3517	1.29	134	3	....	..	92,626	1,543	286
3820	3722	6073	3614	1.14	127	5	....	..	99,131	1,560	40
2941	2801	4928	2973	1.09	107	2	....	..	55,805	1,641	1
2997	2760	3726	2192	1.86	120	3	....	..	99,980	2,755	545
862	808	1197	802	1.17	29	1	....	1	27,800	817	....
4828	4526	6568	3477	1.34	93	27	16	2	126,630	3,564	64
1962	2066	3032	2381	2.07	86	11	....	2	87,284	4,105	123
1314	1236	1831	847	2.21	60	1	1	1	30,560	578	34
873	790	1310	945	2.19	60	2	....	..	24,575	1,069	2022
296061	281292	431317	264702	\$ 1.49	9783	686	250	72	\$ 9,066,145	\$ 170,468	22581





## REPORTS FOR 1879.

## FINANCES.

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CONTINGENT FUND.

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ABSTRACT [B]—CONTINUED.  
SCHOOL

## REPORTS FOR 1879.

## FINANCES.

## CONTINGENT FUND.

DEBIT.				CREDIT.							
On hand at last report.	Received from district tax.	Received from other sources.	Total debit and credit.	Paid for rent and repairs of school-houses.	Paid for fuel.	Paid secretaries and treasurers.	Paid for records, dictionaries and apparatus.	Paid for insurance.	Paid janitors.	Paid for other purposes.	On hand.
3545.72	5417.64	1112.52	10075.88	343.07	2386.29	521.99	24.86	180.70	254.00	3089.57	3318.40
11603.92	14949.21	1529.86	28022.99	4783.41	4229.30	1236.03	203.12	264.25	1211.30	2976.28	13039.32
2154.36	11421.38	827.95	14403.67	1762.48	2470.63	1083.51	269.41	442.95	863.94	3766.29	3744.51
6028.58	6453.20	565.22	13047.00	2336.69	2224.43	1191.03	376.61	454.80	370.65	1716.76	4676.08
3230.61	4886.00	202.40	8319.01	548.29	1537.66	628.91	123.25	131.37	40.10	1790.49	8619.04
3173.56	12354.92	16171.70	31700.18	1531.21	3370.73	1098.94	73.09	828.43	1930.25	18871.02	4498.51
7103.04	20390.50	912.94	28851.48	8670.84	5243.75	1704.36	270.86	442.52	1754.54	4295.47	10469.64
2589.72	4772.98	820.24	8182.84	790.60	1354.69	652.01	115.03	224.10	219.75	1945.17	2881.49
3074.90	7851.24	1045.01	11971.15	688.87	1753.39	869.62	101.02	183.06	459.02	4267.37	3650.80
882.85	2725.19	616.00	3724.04	148.06	751.30	841.36	130.60	11.00	113.25	1650.77	77.68
6658.29	11461.73	550.41	18670.43	1931.35	3391.27	913.13	135.44	603.22	635.63	4407.58	6952.80
5525.54	11247.25	894.71	18257.50	3333.10	2816.70	1211.01	328.61	171.73	637.55	2288.98	7469.82
4777.02	12281.87	552.19	17611.08	1792.74	2061.93	1348.43	179.11	196.89	668.77	2134.06	9229.15
8609.45	13285.47	456.65	22351.57	1864.79	4084.84	1190.94	244.76	204.48	1644.95	5115.49	7961.37
6359.51	7845.18	861.02	15065.71	1670.59	1687.29	1023.28	287.10	603.00	715.40	2277.37	6801.70
4340.25	6107.19	1338.52	11785.96	1211.70	2922.93	741.35	204.17	152.97	694.59	2399.15	3559.10
3845.66	5492.92	483.26	9821.84	1240.26	1299.29	586.20	715.65	297.10	448.95	2112.52	3121.87
2250.06	4246.97	400.41	6897.44	1172.63	1316.72	658.01	24.83	181.50	81.15	1607.69	3854.91
3895.25	6003.46	263.28	13461.99	1119.97	1943.02	854.17	220.67	459.97	331.35	2658.28	5874.56
4961.96	19423.88	806.72	25192.51	2853.92	2388.61	1068.30	196.69	1193.06	1710.65	4945.19	10336.10
1210.58	5577.04	884.96	7672.58	634.36	1353.75	698.13	71.50	15.00	80.16	3070.42	1749.36
1015.55	2322.73	149.50	4047.78	86.61	346.50	462.06	35.50	.....	.....	1669.75	1447.36
6656.07	13041.81	527.16	20225.04	1499.70	3265.29	1281.53	331.66	171.75	701.73	3982.95	9000.43
2346.50	5751.16	78.27	8175.93	606.83	1481.67	748.06	158.04	193.01	32.37	1967.01	3588.95
5003.34	7614.36	240.39	12358.09	1597.15	2047.95	1389.07	278.24	364.66	335.00	2322.75	4523.27
2248.64	3044.73	310.47	5603.84	435.44	1210.21	571.20	66.22	161.35	58.89	1058.69	2041.82
6969.65	25194.28	1407.90	33571.83	4649.90	4284.48	2352.36	367.27	1265.81	3672.57	7862.13	9117.31
14565.09	23817.94	1449.46	39832.49	4978.39	4334.97	1877.62	1087.53	700.45	2465.15	8532.72	15835.68
8315.94	10694.15	1188.19	20398.28	5416.35	2625.52	1088.26	663.15	270.24	763.60	2953.83	6617.38
2944.24	6453.64	163.55	9561.43	1866.64	2238.81	702.25	187.57	193.97	81.45	1068.98	3201.76
3571.98	6007.80	777.45	10877.23	562.37	1496.24	754.44	165.58	62.40	106.82	2943.99	4285.39
20918.03	20741.10	1003.35	42362.48	7383.81	6596.54	2572.65	424.06	336.50	5240.36	4179.65	15978.91
5441.16	10462.68	286.21	16170.05	2045.74	2069.23	1034.60	495.58	96.78	168.90	4631.25	5627.97
2702.54	5242.98	294.03	8239.55	867.82	1532.56	851.14	473.27	172.90	40.00	1458.48	2843.38
6155.46	9727.70	418.82	16901.98	2488.36	2503.44	1481.85	330.95	261.62	343.47	2965.76	5926.53
9071.27	13627.09	1814.85	24513.21	3120.72	4339.14	1694.75	375.09	346.58	871.37	4544.98	9220.58
2967.05	14200.22	692.89	17860.16	2534.61	2962.64	883.21	170.75	71.73	473.85	5918.90	4829.97
4250.17	11779.00	325.95	16355.12	1076.80	2407.25	963.52	144.22	403.59	1199.63	3296.29	6843.62
2512.12	5275.00	631.72	8418.84	825.66	1509.97	914.85	130.00	202.32	234.40	1339.80	3211.34
3316.81	12786.79	1205.50	17309.10	5614.54	2055.23	943.36	157.04	478.85	2114.10	2402.98	3543.00
4539.49	9969.78	908.05	15414.32	1924.20	2419.33	1171.84	366.93	177.44	412.50	3487.78	5451.30
4395.69	7407.43	550.88	12344.00	1179.23	2764.76	933.94	41.55	335.47	780.60	2044.59	4263.86
3626.00	7020.04	1070.31	11716.35	1560.37	1901.87	1062.95	52.43	63.75	537.26	2484.35	4083.37
4800.67	9681.73	929.15	15111.55	2438.54	2219.08	1390.23	399.11	437.00	760.10	3750.28	3717.21
1574.67	3453.64	93.25	5121.56	697.51	929.52	400.00	117.45	212.70	127.95	2073.92	562.51
5581.51	7346.90	458.68	13386.99	1680.99	3185.33	979.05	627.85	279.03	588.37	1144.86	4901.51
6370.39	12356.80	416.52	19143.21	2045.40	2457.02	1863.85	353.41	541.23	1346.61	3566.68	6969.01
2825.87	3348.68	91.97	6306.52	1063.33	1135.71	747.32	107.21	180.55	160.05	827.34	2065.01
2950.37	4863.60	187.14	7451.01	850.87	1796.32	549.01	200.80	93.90	65.00	1471.69	2923.42
474457.66	927372.13	90507.17	1492236.96	185148.52	237322.35	103084.87	28010.82	27879.26	70196.53	303307.81	537384.29

## ABSTRACT [B]—CONTINUED.

## SCHOOL FINANCES.

COUNTY.	TEACHERS' FUND.							
	DEBIT.					CREDIT.		
	On hand at last report.	Received from district tax.	Received from semi-annual apportionment.	Received from other sources.	Total debit and credit.	Paid teachers since last report.	Paid for other purposes.	On hand.
Adair .....	12259.08	24705.22	6122.25	129.52	43216.02	27217.98	956.16	15041.90
Adams .....	13223.96	16097.45	4831.15	412.39	34564.95	20924.15	621.47	13019.33
Allamakee .....	12073.47	23509.67	7039.51	319.19	42941.84	30714.33	189.31	12038.20
Appanoose .....	9393.73	20428.79	6842.42	168.81	37333.75	23397.88	359.52	13576.85
Audubon .....	5907.92	12842.82	2267.34	532.04	21349.62	13172.29	277.08	7900.25
Benton .....	28415.08	33608.25	10878.12	1971.88	74873.28	46314.56	2793.63	25765.09
Black Hawk .....	32245.25	34983.21	10110.51	732.22	78071.19	43007.68	857.16	34206.35
Boone .....	21577.83	27988.34	7657.32	122.62	57348.11	33563.25	86.57	23896.29
Bremer .....	15737.15	18174.49	5016.68	1070.14	39998.46	23592.92	197.82	16267.72
Buchanan .....	18290.04	26713.69	8998.81	560.06	54562.59	33875.34	525.99	20161.26
Buena Vista .....	9958.10	15348.76	2151.90	661.21	28119.97	15859.99	1053.36	11206.62
Butler .....	20832.00	21587.67	6500.08	991.54	49911.29	30735.28	1390.29	17785.72
Calhoun .....	10281.48	11049.05	2810.40	1490.40	25631.33	14867.25	578.85	10185.23
Carroll .....	10084.25	22864.55	2924.40	47.32	35720.52	23196.71	107.17	12416.64
Cass .....	24394.20	31407.95	3230.25	4043.96	63081.36	36759.91	1239.02	26082.43
Cedar .....	31023.41	33451.02	9371.26	1082.23	74942.97	40765.49	232.34	33945.14
Cerro Gordo .....	17765.13	23359.49	4574.90	1289.94	46968.46	28603.75	1668.46	16696.25
Cherokee .....	8145.64	17663.69	2917.90	137.48	28864.71	19016.69	.....	9848.02
Chickasaw .....	13541.91	17873.08	5586.94	2911.19	39418.12	24045.57	179.57	15193.96
Clarke .....	9315.44	15610.77	6124.42	1033.96	32084.59	19959.57	29.67	12095.35
Olay .....	6777.24	8412.97	1552.60	2843.78	19586.59	8734.50	1146.17	9705.92
Clayton .....	28545.31	37472.71	11340.13	1295.01	78753.16	47669.18	645.13	30438.85
Clinton .....	31045.25	51126.15	15886.50	968.15	99026.05	64458.86	4609.79	29957.40
Crawford .....	14875.90	25862.15	4588.43	930.57	46257.05	29015.38	.....	17241.67
Dallas .....	17854.14	35866.29	10221.56	657.75	64599.74	39898.80	437.66	24263.28
Davis .....	7389.99	9354.11	7323.34	283.80	24351.24	17807.56	206.96	6336.72
Decatur .....	13481.56	14806.02	6422.77	497.58	35007.93	22086.49	388.05	12533.39
Delaware .....	19625.44	26953.59	7934.66	709.00	53227.69	32923.09	649.44	21655.16
Des Moines .....	21179.19	41390.67	17430.96	10776.25	90767.07	58525.11	256.36	31985.60
Dickinson .....	2983.30	4091.23	862.89	635.77	8453.19	5236.52	.....	3216.67
Dubuque .....	16657.83	44069.11	17749.40	863.91	79340.25	64156.40	248.55	14935.30
Emmet .....	6275.41	3041.65	1714.89	.....	11031.95	5265.50	654.28	5112.17
Fayette .....	20408.73	22334.33	8341.27	1905.64	52969.97	34010.79	268.78	18710.40
Floyd .....	15109.01	25477.17	6562.30	694.14	47842.62	30975.15	2205.49	14661.98
Franklin .....	10951.42	21398.33	4039.07	887.50	37236.35	22900.63	988.51	13337.21
Fremont .....	22351.50	27464.79	6086.95	2565.11	58468.35	33825.41	116.46	24526.48
Greene .....	10734.13	23167.39	4251.56	252.48	43405.56	24961.77	863.72	17590.07
Grundy .....	9659.81	25824.52	4230.06	124.40	39887.79	27352.21	368.37	12167.21
Guthrie .....	18380.34	27849.15	5852.62	362.89	47445.00	30350.23	1070.83	16023.94
Hamilton .....	17235.66	19821.75	3040.64	607.73	40725.78	20667.73	160.00	19898.05
Hancock .....	4256.54	6942.93	2063.86	1242.17	14505.55	10071.32	189.15	4245.08
Hardin .....	27512.31	25272.43	8783.51	303.01	61879.31	34318.39	500.05	27080.87
Harrison .....	24416.74	23822.31	9330.48	4040.41	62039.94	36419.22	45.54	25575.18
Henry .....	24721.48	23391.13	8441.47	503.24	57062.32	29944.07	586.51	26531.74
Howard .....	5833.80	17931.23	4452.10	998.30	29255.46	20497.19	541.53	8216.74
Humboldt .....	5120.84	8073.02	1459.85	482.43	15136.14	11169.71	58.23	3908.20
Ida .....	4934.09	8392.53	2382.89	275.82	16015.32	9978.52	281.04	5755.76
Iowa .....	19555.59	23175.33	7993.49	3865.92	59625.38	35888.15	484.87	23252.36
Jackson .....	16497.12	30566.22	8634.27	942.08	56631.69	36389.75	755.78	19486.16
Jasper .....	19323.35	40323.39	13518.69	253.11	73988.55	48199.64	317.20	25471.71

## ABSTRACT [B]—CONTINUED.

## SCHOOL FINANCES.

COUNTY.	TEACHERS' FUND.							
	DEBIT.					CREDIT.		
	On hand at last report.	Received from district tax.	Received from semi-annual apportionment.	Received from other sources.	Total debit and credit.	Paid teachers since last report.	Paid for other purposes.	On hand.
Jefferson .. . . .	14709.01	16151.34	9148.76	297.28	40306.39	23959.91	1155.83	15190.65
Johnson.....	22338.96	31513.07	9085.51	6342.81	69758.35	43902.98	2110.79	23741.58
Jones.....	15573.06	22809.15	9083.22	1152.99	48618.42	31274.32	831.10	16518.00
Keokuk.....	13819.68	24970.13	8468.64	1266.65	48525.10	23624.01	1023.16	16877.93
Kossuth.....	10975.06	17279.55	2313.31	82.07	30650.29	17692.16	1201.99	11756.14
Lee.....	9986.90	32070.31	17595.44	13319.18	73451.83	50638.01	1643.81	21170.01
Linn.....	23434.66	45953.09	16499.57	1417.54	87304.86	59301.21	243.09	27760.56
Louisa.....	12213.01	17350.51	6813.27	747.21	37123.99	23192.44	1038.09	12993.46
Lucas.....	16265.28	16720.2	5576.93	405.96	38968.38	21167.72	1990.64	15810.02
Lyon.....	2453.71	5917.61	2507.98	394.33	11273.63	8090.12	214.01	2369.50
Madison.....	21088.03	22994.21	8055.39	306.75	52344.38	31916.45	36.59	20391.34
Mahaska.....	24043.02	33147.97	11005.79	2552.23	70749.01	40238.21	1164.06	23946.74
Marion.....	20409.08	25380.12	11355.40	984.05	58128.65	32654.57	273.35	25200.73
Marshall.....	22671.14	44336.97	9205.03	2105.39	77618.53	51374.13	130.49	26113.91
Mills.....	15446.51	22588.77	7383.92	1169.84	46589.04	25166.62	1441.11	19981.31
Mitchell.....	12612.25	16240.55	5567.83	614.26	35074.89	24952.15	611.70	9511.04
Monona.....	19213.72	17753.13	4825.66	355.79	42148.30	21595.38	360.52	20191.90
Monroe.....	10655.17	14908.59	6373.62	372.39	32409.77	18835.13	93.85	13380.79
Montgomery.....	11211.92	21812.06	5473.77	305.96	41303.71	24537.42	41.22	16725.07
Muscatine....	26057.77	34354.95	12311.05	1054.91	74278.68	42273.90	818.18	31186.60
O'Brien.....	3424.80	8145.88	1224.40	20.50	12815.08	10316.26	13.63	2485.14
Osceola.....	1410.84	7123.95	1005.16	266.41	9806.36	7227.21	23.96	2555.19
Page.....	17717.40	33994.47	6473.89	594.14	58780.00	35639.63	754.23	22386.14
Palo Alto.....	6503.79	12784.35	1786.80	379.19	21454.13	12267.23	..	9186.90
Plymouth.....	1706.78	19562.48	3821.77	207.45	40651.06	24317.42	397.99	15937.65
Pocahontas.....	571.10	7709.86	1982.97	182.83	19446.76	11304.23	660.38	7482.10
Polk.....	33893.14	60406.83	22589.75	1621.85	118311.57	69874.78	1512.10	46924.69
Pottawattamie.....	35648.58	58824.08	14417.34	2374.43	111304.43	64042.31	2323.94	44938.18
Poweshiek....	23103.41	34095.48	7455.83	1340.46	68995.18	40140.36	164.25	28690.57
Ringgold.....	8220.95	17818.79	5481.09	690.83	32211.66	22344.80	142.55	9724.31
Sac.....	10195.46	12799.12	1133.12	1055.09	25182.79	15370.67	466.03	9346.09
Scott.....	60418.38	70567.18	22242.62	509.09	153737.27	95791.97	161.47	57783.83
Shelby.....	15499.67	21935.40	4908.77	620.65	42964.49	24664.95	209.17	18090.37
Sioux.....	7724.47	12596.99	3651.54	320.40	24293.40	15744.18	119.63	8429.59
Story.....	14400.46	24035.40	7976.50	55.86	46468.22	27968.20	103.54	18401.48
Tama.....	31996.92	34396.47	10074.23	960.81	77423.43	45060.79	..	32367.64
Taylor.....	15761.24	28735.32	5171.81	423.78	48397.15	31091.95	19.62	17235.58
Union.....	7418.33	23607.81	8798.02	978.05	43802.21	30183.78	472.39	13146.04
Van Buren.....	16602.12	16550.18	7708.65	1282.47	42148.42	24494.75	592.12	17066.55
Wapello.....	18476.82	29296.38	10779.02	453.67	59007.89	37175.13	212.30	21620.46
Warren.....	23796.91	22094.24	8220.20	668.84	54780.19	30367.72	756.86	23655.61
Washington.....	15558.57	21714.66	10483.90	721.81	48478.94	30002.63	800.01	17676.30
Wayne.....	14614.10	23511.23	6858.22	1223.46	43012.06	22651.46	1270.68	19089.92
Webster.....	14367.94	22359.24	5775.95	385.52	42488.70	27755.07	927.24	14206.39
Winnebago.....	3151.82	6238.74	1112.80	.....	10523.36	6546.25	.....	3977.11
Winneblesh.....	20058.71	22461.25	10305.65	201.88	53625.49	33405.55	293.57	19856.37
Woodbury.....	18263.89	26555.27	11284.44	764.31	56867.91	39441.65	605.01	16821.25
Worth.....	8517.75	8778.20	3144.05	246.62	20686.62	13509.47	251.95	6925.20
Wright.....	5500.63	12245.48	2157.97	215.38	20118.56	13998.88	587.56	5532.12
Total.....	1591029.50	2347143.18	706450.51	115522.46	4760145.65	2927306.01	62623.70	1770213.94

TABLE SHOWING DEFICITS AND EXCESSES OF THE

COUNTY.	SCHOOL-HOUSE.		CONTINGENT.		TEACHERS'.		TOTAL.	
	Deficit.	Excess.	Deficit.	Excess.	Deficit.	Excess.	Deficit.	Excess.
Adair .....	\$ 389.33	\$ .....	\$ 24.35	\$ .....	\$ 211.26	\$ .....	\$ 624.94	\$ .....
Adams .....	.....	147.54	.....	131.27	.....	216.13	.....	494.94
Allamakee .....	27.85	.....	.....	451.46	.....	976.62	.....	1,400.23
Appanoose .....	4.93	.....	92.68	.....	.....	.83	96.78	.....
Audubon .....	1.10	.....	29.05	.....	92.18	.....	122.33	.....
Benton .....	231.70	.....	.....	1,907.19	2,363.60	.....	688.11	.....
Bl'k Hawk .....	.....	2.90	.....	.80	115.10	.....	111.40	.....
Boone .....	265.19	.....	132.31	.....	545.93	.....	943.43	.....
Bremer .....	115.61	.....	214.87	.....	588.90	.....	919.38	.....
Buchanan .....	768.83	.....	256.51	.....	286.67	.....	1,312.01	.....
Buena Vi'a .....	84.95	.....	.....	91.70	670.97	.....	664.22	.....
Butler .....	.....	58.46	.....	29.11	.....	10.26	.....	97.83
Calhoun .....	748.87	.....	.....	1.07	.....	.77	747.03	.....
Carroll .....	267.35	.....	181.35	.....	.....	10.97	437.73	.....
Cass .....	.....	.....	3.97	.....	.....	24.00	.....	20.03
Cedar .....	59.66	.....	90.79	.....	364.44	.....	514.89	.....
Cer'o Gor'o .....	590.98	.....	.....	67.25	990.12	.....	1,513.85	.....
Cherokee .....	1,028.81	.....	.....	553.67	.....	315.70	159.44	.....
Chickasaw .....	.....	270.92	94.06	.....	112.32	.....	.....	64.54
Clarke .....	556.90	.....	205.35	.....	520.05	.....	1,282.30	.....
Clay .....	893.06	.....	780.85	.....	3,043.12	.....	5,617.03	.....
Clayton .....	.....	1,725.82	198.97	.....	740.28	.....	.....	786.57
Clinton .....	158.93	.....	653.49	.....	.....	21.01	791.41	.....
Crawford .....	.....	1,121.25	.....	.....	.....	.....	.....	1,121.25
Dallas .....	54.82	.....	131.35	.....	.....	114.51	71.66	.....
Davis .....	100.53	.....	14.24	.....	381.22	.....	495.99	.....
Decatur .....	.....	212.44	.....	832.67	.....	116.96	.....	662.07
Delaware .....	.....	287.94	372.31	.....	.....	.....	84.37	.....
Des Moin's .....	73.56	.....	186.84	.....	379.39	.....	639.79	.....
Dickinson .....	.....	.....	.....	12.40	.....	100.00	.....	112.40
Dubuque .....	242.92	.....	555.13	.....	.....	190.85	607.20	.....
Emmet .....	40.81	.....	.....	.....	.02	.....	40.83	.....
Fayette .....	.....	40.23	888.45	.....	543.65	.....	1,391.87	.....
Floyd .....	.....	.....	135.72	.....	.....	1,116.97	.....	981.25
Franklin .....	122.65	.....	17.26	.....	435.01	.....	574.92	.....
Fremont .....	.....	104.20	143.79	.....	.....	48.02	.....	8.43
Greene .....	450.72	.....	703.32	.....	.....	184.72	1,005.32	.....
Grundy .....	280.27	.....	168.67	.....	.....	6.59	442.35	.....
Guthrie .....	.....	.48	.....	.01	.01	.....	.....	.48
Hamilton .....	.....	50.53	370.64	.....	276.57	.....	596.68	.....
Hancock .....	2,300.66	.....	709.34	.....	2,710.12	.....	5,720.12	.....
Hardin .....	17.97	.....	99.00	.....	.....	.....	116.97	.....
Harrison .....	439.17	.....	.....	72.17	.....	566.79	.....	199.79
Henry .....	.....	65.12	3.35	.....	71.45	.....	9.68	.....
Howard .....	443.16	.....	241.14	.....	1,058.08	.....	1,742.33	.....
Humboldt .....	64.71	.....	34.08	.....	3.84	.....	102.63	.....
Ida .....	92.80	.....	.....	.....	.02	.....	92.82	.....
Iowa .....	.....	110.18	232.35	.....	376.55	.....	498.72	.....
Jackson .....	.....	422.03	.....	261.05	.....	583.71	.....	1,266.79
Jasper .....	.....	21.05	.....	635.44	137.41	.....	.....	519.08

## DIFFERENT FUNDS, BY COUNTIES, FOR 1878-9.

COUNTY.	SCHOOL-HOUSE.		CONTINGENT.		TEACHERS'.		TOTAL.	
	Deficit.	Excess.	Deficit.	Excess.	Deficit.	Excess.	Deficit.	Excess.
Jefferson ..	\$ 125.98	\$ .....	\$ 3.64	\$ .....	\$ 34.61	\$ .....	\$ 164.23	\$ .....
Johnson ..	.....	27.91	45.12	.....	.02	.....	17.23	.....
Jones .....	.....	841.87	215.74	.....	78.08	.....	.....	548.05
Keokuk ...	1,603.45	.....	57.67	.....	.....	12.70	1,648.42	.....
Kossuth...	.....	59.14	25.86	.....	.....	91.81	.....	125.09
Lee .....	3,620.10	.....	31.71	.....	.....	91.50	3,560.31	.....
Linn .....	2,543.66	.....	112.84	.....	2,759.53	.....	5,416.03	.....
Louisa ...	.....	332.00	10.79	.....	367.50	.....	46.29	.....
Lucas.....	42.94	.....	40.92	.....	239.01	.....	322.87	.....
Lyon.....	.....	46.73	.....	227.03	23.73	.....	.....	250.03
Madison ..	113.11	.....	.....	150.55	.....	300.19	.....	337.63
Mahaska ..	.....	148.00	130.32	.....	219.18	.....	201.50	.....
Marion ....	.....	215.76	1,848.52	.....	.....	1,503.30	129.46	.....
Marshall ..	.....	200.24	248.58	.....	.....	164.38	.....	116.04
Mills.....	73.96	.....	.....	259.30	595.70	.....	410.36	.....
Mitchell...	381.36	.....	491.50	.....	25.83	.....	898.69	.....
Monona ...	.....	.....	.....	428.14	9.99	.....	.....	418.15
Monroe ...	.....	456.62	7.54	.....	.....	281.05	.....	730.13
Montg'm'y.	.....	308.16	.....	274.14	.....	629.34	.....	1,211.64
Muscatine ..	113.66	.....	.....	538.43	150.42	.....	.....	274.35
O'Brien ...	.....	105.85	.....	.....	.....	1.25	.....	107.10
Osceola....	20.68	.....	72.90	.....	.....	123.88	.....	30.30
Page .....	213.38	.....	609.81	.....	425.41	.....	1,248.60	.....
Palo Alto..	2.76	.....	92.02	.....	.....	.50	94.28	.....
Plymouth..	.....	.....	522.82	.....	517.94	.....	1,040.76	.....
Pocah'ntas	.81	.....	.....	.....	.....	.....	.81	.....
Polk .....	117.28	.....	361.27	.....	.....	54.20	424.35	.....
Pot'wat'm.	.....	.....	.....	16.04	.....	48.43	.....	64.47
Poweshiek ..	.....	220.17	131.93	.....	261.73	.....	173.49	.....
Ringgold ..	.....	62.98	100.43	.....	515.79	.....	553.24	.....
Sac .....	.....	350.88	.....	441.19	122.91	.....	.....	669.16
Scott.....	.....	.04	151.51	.....	399.78	.....	551.25	.....
Shelby ....	.12	.....	.....	1.09	.....	.01	.....	.98
Sioux .....	129.65	.....	187.17	.....	275.48	.....	592.30	.....
Story .....	5.18	.....	.....	11.90	30.48	.....	23.76	.....
Tama .....	.....	90.60	.....	123.49	445.38	.....	231.29	.....
Taylor.....	.50	.....	.....	.....	.....	.....	.50	.....
Union .....	1,995.26	.....	.....	72.79	437.87	.....	2,360.34	.....
Van Buren ..	.....	504.47	.....	19.15	1,024.69	.....	501.07	.....
Wapello ..	603.65	.....	4,038.60	.....	518.88	.....	5,161.13	.....
Warren ...	221.25	.....	.....	93.20	35.09	.....	163.14	.....
Washing'n ..	5.29	.....	62.04	.....	78.19	.....	145.52	.....
Wayne.....	120.90	.....	37.55	.....	304.96	.....	463.41	.....
Webster ..	18.53	.....	425.47	.....	286.47	.....	730.47	.....
Win'ebago..	550.48	.....	.....	72.78	159.62	.....	637.32	.....
Win'eshiek ..	.....	468.67	.....	.....	.10	.....	.....	468.57
Woodbury..	198.03	.....	28.46	.....	161.16	.....	387.67	.....
Worth .....	.....	50.14	.....	.....	.....	.....	.....	50.14
Wright.....	.....	407.71	298.11	.....	.....	181.02	.....	290.62
Total ...	23,740.79	9,539.03	18,356.42	7,276.48	28,423.76	8,052.97	59,080.62	13,428.13



## ABSTRACT [C]

## EXAMINATION

COUNTY.	PROFES- SIONAL CERTIF- ICATES ISSUED.		FIRST GRADE CERTIF- ICATES ISSUED.		SECOND GRADE CERTIF- ICATES ISSUED.		THIRD GRADE CERTIF- ICATES ISSUED.		TOTAL NUMBER ISSUED.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1 Adair . . . . .	2	1	27	17	49	94	....	....	78	112
2 Adams . . . . .	....	....	41	29	40	55	....	2	81	86
3 Allamakee . . . . .	5	1	40	50	30	80	7	27	82	158
4 Appanoose . . . . .	....	....	31	52	48	62	2	4	81	118
5 Audubon . . . . .	....	....	21	23	16	32	....	8	37	63
6 Benton . . . . .	....	....	45	57	67	129	....	....	112	186
7 Black Hawk . . . . .	3	....	21	47	49	86	33	70	106	203
8 Boone . . . . .	7	4	49	79	37	79	6	17	99	179
9 Bremer . . . . .	6	16	13	36	32	74	....	....	51	126
10 Buchanan . . . . .	1	1	22	31	47	149	3	7	73	188
11 Buena Vista . . . . .	1	....	21	29	7	13	6	14	35	56
12 Butler . . . . .	....	....	34	38	45	101	6	19	85	158
13 Calhoun . . . . .	....	....	15	10	17	23	8	18	40	51
14 Carroll . . . . .	....	....	22	9	30	26	47	62	99	97
15 Cass . . . . .	....	....	29	48	31	83	2	7	62	138
16 Cedar . . . . .	....	....	25	28	76	39	26	24	127	91
17 Cerro Gordo . . . . .	....	....	45	23	51	100	....	....	96	123
18 Cherokee . . . . .	....	....	28	34	12	33	....	....	40	67
19 Chickasaw . . . . .	....	....	37	20	36	101	....	....	73	121
20 Clarke . . . . .	3	....	22	38	39	49	14	13	78	100
21 Clay . . . . .	....	....	22	32	6	19	4	15	32	66
22 Clayton . . . . .	16	4	22	18	31	45	22	98	91	165
23 Clinton . . . . .	....	....	41	90	41	133	....	....	82	223
24 Crawford . . . . .	....	....	24	26	36	67	....	....	60	93
25 Dallas . . . . .	....	....	28	34	61	69	....	....	89	103
26 Davis . . . . .	....	....	63	68	10	40	....	....	73	108
27 Decatur . . . . .	....	....	27	24	34	57	15	19	76	100
28 Delaware . . . . .	....	....	22	29	37	104	6	22	65	155
29 Des Moines . . . . .	....	....	44	119	26	39	18	34	88	192
30 Dickinson . . . . .	....	....	7	5	3	8	1	9	11	22
31 Dubuque . . . . .	11	3	19	66	12	89	8	27	50	185
32 Emmet . . . . .	2	....	9	8	7	7	2	1	20	16
33 Fayette . . . . .	....	....	11	13	17	31	13	61	41	105
34 Floyd . . . . .	1	....	18	28	31	114	5	16	55	158
35 Franklin . . . . .	....	....	32	33	22	35	18	27	72	95
36 Fremont . . . . .	....	....	36	39	35	50	....	....	71	89
37 Greene . . . . .	5	3	34	62	18	65	1	12	58	142
38 Grundy . . . . .	....	....	17	21	39	81	5	29	61	131
39 Guthrie . . . . .	....	....	55	76	44	83	....	....	99	159
40 Hamilton . . . . .	....	....	37	61	10	101	....	....	47	162
41 Hancock . . . . .	....	....	7	26	3	27	9	6	19	59
42 Hardin . . . . .	....	....	47	61	28	43	23	63	98	167
43 Harrison . . . . .	....	....	69	30	25	109	....	....	94	139
44 Henry . . . . .	....	....	22	56	18	82	1	9	41	147
45 Howard . . . . .	....	....	17	33	24	46	5	15	46	94
46 Humboldt . . . . .	....	....	12	14	7	18	11	35	30	67
47 Ida . . . . .	....	....	6	6	11	9	12	17	29	32
48 Iowa . . . . .	....	....	67	40	50	83	7	18	124	141
49 Jackson . . . . .	....	....	37	22	26	48	41	75	104	145
50 Jasper . . . . .	....	....	26	33	51	106	104	89	181	228



REPORTS FOR 1879.  
OF TEACHERS.

APPLI- CANTS REJECT- ED.		APPLI- CANTS EXAM- INED.		CERTIF- ICATES REVOK- ED.		AV. AGE OF AP- PLI- CANTS.		NO EX- PERI- ENCE IN TEACH- ING.		TAUG'T LESS THAN ONE YEAR.		HOLD- ING STATE CERTIF- CATES.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
22	39	100	151	.....	.....	23	21	27	49	36	63	.....	.....	1
4	6	85	92	.....	.....	22	21	16	23	33	38	.....	.....	2
1	14	83	172	.....	1	24	20	8	23	10	23	.....	.....	3
.....	.....	81	118	.....	.....	23	21	13	18	.....	.....	.....	.....	4
3	5	40	68	.....	.....	27	21	4	16	6	17	.....	.....	5
38	50	150	236	.....	.....	23	21	18	37	34	41	.....	.....	6
19	45	125	248	.....	1	24	23	21	45	24	31	.....	.....	7
10	7	109	186	.....	.....	27	19	7	12	.....	7	.....	.....	8
7	22	58	148	.....	.....	22	18	5	13	7	14	.....	.....	9
3	16	76	204	.....	.....	24	20	8	17	7	13	.....	.....	10
5	10	40	66	.....	.....	27	25	10	11	5	6	.....	.....	11
14	39	99	197	.....	.....	26	23	6	13	5	9	.....	.....	12
7	9	47	60	.....	.....	23	22	1	2	5	3	.....	.....	13
27	21	126	118	.....	.....	24	21	12	17	9	12	.....	.....	14
.....	2	62	140	.....	1	26	22	12	19	2	5	.....	.....	15
14	28	141	119	.....	.....	24	19	20	18	.....	.....	1	1	16
30	75	126	198	.....	.....	25	20	8	41	26	60	.....	.....	17
4	7	44	74	.....	.....	25	25	6	10	5	9	.....	.....	18
8	25	81	146	.....	.....	27	20	10	20	9	17	.....	1	19
6	3	84	103	.....	.....	24	22	22	27	28	32	.....	.....	20
3	5	35	71	.....	.....	30	21	2	3	7	7	.....	.....	21
10	35	101	200	.....	.....	27	21	16	45	23	78	.....	.....	22
5	37	87	260	.....	1	25	23	6	30	18	22	.....	.....	23
3	6	63	99	.....	.....	27	20	9	11	5	10	.....	.....	24
23	25	112	128	.....	.....	23	20	8	13	.....	.....	2	.....	25
7	8	80	116	.....	.....	25	20	5	20	24	34	.....	.....	26
3	14	79	114	.....	.....	28	21	12	16	8	18	.....	.....	27
30	90	95	245	.....	.....	24	20	16	39	5	23	.....	1	28
4	8	92	200	.....	.....	28	22	11	24	20	17	1	.....	29
5	12	16	34	.....	.....	32	22	.....	4	.....	4	.....	.....	30
4	7	54	192	.....	.....	28	23	6	11	9	17	.....	.....	31
.....	.....	20	16	.....	1	27	20	5	2	4	1	.....	.....	32
3	8	44	113	.....	.....	23	21	11	17	13	18	.....	.....	33
13	31	68	189	.....	.....	23	20	9	60	12	94	.....	.....	34
7	19	79	114	.....	.....	22	20	9	14	15	8	.....	.....	35
15	23	86	112	.....	.....	22	19	31	44	40	65	.....	.....	36
7	34	65	176	.....	.....	24	21	16	56	8	33	.....	.....	37
2	15	63	146	.....	.....	28	20	5	33	4	21	.....	.....	38
10	20	109	179	.....	.....	26	22	15	30	22	50	.....	.....	39
.....	4	47	166	.....	1	25	21	4	16	2	6	.....	.....	40
1	3	20	62	.....	.....	26	23	6	.....	10	15	.....	.....	41
37	90	135	257	.....	.....	25	22	17	26	12	20	1	.....	42
3	21	97	160	.....	2	22	18	3	40	8	1	.....	.....	43
10	27	51	174	.....	.....	25	22	8	34	10	24	.....	.....	44
1	3	47	97	.....	.....	26	20	16	15	2	5	1	.....	45
.....	10	30	77	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	46
4	3	33	35	.....	.....	21	20	4	5	6	8	.....	.....	47
6	21	130	162	.....	.....	23	21	11	24	27	48	.....	.....	48
38	60	142	205	.....	3	27	21	13	34	28	39	.....	.....	49
46	101	227	329	.....	.....	23	21	19	15	8	20	.....	3	50

## ABSTRACT [C]—CONTINUED.

## EXAMINATION

COUNTY.	PROFES- SIONAL CERTIF- ICATES ISSUED.		FIRST GRADE CERTIF- ICATES ISSUED.		SECOND GRADE CERTIF- ICATES ISSUED.		THIRD GRADE CERTIF- ICATES ISSUED.		TOTAL NUMBER ISSUED.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
51 Jefferson .....			47	39	30	56	16	21	93	116
52 Johnson .....	1	2	28	58	29	69	21	73	79	202
53 Jones .....	3	4	25	40	28	56	....	....	56	100
54 Keokuk .....			45	40	56	70	17	51	118	161
55 Kossuth .....			18	12	10	31	....	3	28	46
56 Lee .....			59	83	22	37	....	....	81	120
57 Linn .....			48	122	69	164	....	....	117	286
58 Louisa .....	2		9	20	16	40	34	62	61	122
59 Lucas .....	5	1	24	25	13	36	9	32	51	94
60 Lyon .....			10	16	11	23	3	5	24	44
61 Madison .....	1		36	28	29	46	16	36	82	110
62 Mahaska .....			36	57	33	143	....	....	69	200
63 Marion .....			53	36	48	58	....	17	101	111
64 Marshall .....			27	31	61	116	8	15	96	162
65 Mills .....			32	39	10	50	3	25	45	114
66 Mitchell .....			19	10	18	28	22	67	59	105
67 Monona .....			33	36	24	46	3	17	60	99
68 Monroe .....			11	31	20	52	3	14	34	97
69 Montgomery .....			21	46	36	83	5	9	62	138
70 Muscatine .....	2	18	33	27	30	80	....	....	65	125
71 O'Brien .....			15	9	8	24	1	3	24	36
72 Osceola .....			9	8	15	18	2	11	26	37
73 Page .....	28	14	21	40	29	74	3	11	81	148
74 Palo Alto .....			19	22	9	29	2	15	30	66
75 Plymouth .....			37	30	27	24	10	35	74	89
76 Pocahontas .....	1	1	4	5	23	35	9	30	37	71
77 Polk .....			55	77	52	104	....	....	107	181
78 Pottawattamie .....	3	1	47	64	49	88	25	61	124	214
79 Poweshiek .....			40	54	69	123	....	....	109	177
80 Ringgold .....			29	24	26	75	7	34	62	133
81 Sac. ....			7	19	4	34	2	21	13	74
82 Scott .....			75	98	38	71	8	22	121	191
83 Shelby .....	2	2	29	32	35	73	3	9	69	116
84 Sioux .....			9	7	21	12	10	19	40	38
85 Story .....			32	20	36	38	22	34	90	92
86 Tama .....			43	39	78	120	18	63	139	222
87 Taylor .....			40	38	54	90	....	....	94	128
88 Union .....			35	43	13	25	3	11	51	79
89 Van Buren .....			31	30	57	92	....	....	88	122
90 Wapello .....			38	55	35	54	9	14	82	123
91 Warren .....			48	44	38	68	9	36	95	148
92 Washington .....	7		12	30	53	90	7	49	79	169
93 Wayne .....	5	2	64	36	13	88	5	12	87	138
94 Webster .....			22	43	41	86	7	18	70	147
95 Winnebago .....	1	1	2	2	10	15	3	6	16	24
96 Winneshiek .....			27	31	33	63	16	84	76	178
97 Woodbury .....	4		25	12	62	17	....	...	91	29
98 Worth .....			9	14	16	34	9	18	34	66
99 Wright .....			20	15	15	25	3	15	38	55
Total .....	128	79	2924	3617	3074	6189	844	2067	6970	11952

REPORTS FOR 1879.  
OF TEACHERS.

APPLI- CANTS REJECT- ED.		APPLI- CANTS EXAM- INED.		CERTIF- ICATES RE- VOKED.		AVER- AGE AGE OF APPLI- CANTS.		NO EX- PERI- ENCE IN TEACH- ING.		TAUG'T LESS THAN ONE YEAR.		HOLDING STATE CERTIFI- CATES.	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
4	11	97	127	.....	.....	25	22	8	31	18	23	1	151
24	76	103	278	.....	.....	24	20	18	34	...	....	.....	452
2	4	58	104	.....	.....	24	21	.....	.....	.....	.....	1	253
9	12	127	173	1	.....	23	22	17	30	29	35	.....	54
2	5	30	51	.....	.....	25	20	3	10	5	15	.....	55
.....	.....	81	120	.....	.....	23	21	13	23	16	27	.....	56
5	7	122	293	.....	.....	27	22	22	54	16	25	1	157
19	39	80	161	.....	.....	25	23	8	14	12	14	.....	158
4	9	55	103	.....	.....	27	22	8	23	7	17	.....	59
.....	.....	24	44	.....	.....	28	23	5	7	2	9	.....	60
10	15	92	125	.....	.....	23	19	10	16	14	18	.....	61
12	51	81	251	.....	.....	27	22	6	42	12	46	.....	62
10	24	111	135	.....	.....	.....	.....	.....	17	.....	.....	.....	63
39	78	135	240	.....	.....	23	24	14	10	8	5	1	164
10	21	55	135	.....	.....	28	25	5	36	9	24	.....	165
5	19	64	124	.....	.....	25	22	6	16	10	16	.....	66
.....	1	60	100	.....	.....	24	20	8	19	8	20	.....	67
5	14	39	111	.....	.....	24	23	8	10	14	16	.....	68
.....	.....	62	138	.....	.....	25	22	12	26	10	30	.....	69
7	23	72	148	.....	.....	23	20	6	9	9	17	1	70
.....	5	24	41	.....	.....	21	19	6	4	2	5	.....	71
3	2	29	39	.....	.....	25	22	10	11	7	9	.....	72
8	8	89	156	.....	.....	23	21	12	40	6	25	.....	73
2	2	32	68	.....	.....	28	21	4	15	11	3	.....	74
3	8	77	97	.....	.....	27	21	11	16	9	17	.....	75
8	11	45	82	.....	.....	24	21	10	18	7	20	.....	76
9	16	116	197	.....	.....	25	21	14	26	10	22	1	477
7	17	131	231	.....	.....	22	23	13	12	30	27	.....	78
25	5	134	182	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
9	11	71	144	1	.....	26	21	11	20	2	17	.....	80
10	2	23	76	.....	.....	20	21	3	3	6	4	.....	81
5	12	126	203	.....	.....	28	24	9	11	4	12	1	282
11	29	80	145	.....	.....	.....	.....	24	26	8	15	.....	83
.....	.....	40	38	.....	.....	25	19	5	9	8	12	.....	84
30	20	120	112	.....	.....	23	19	10	16	12	20	.....	85
5	19	144	241	.....	.....	24	20	30	66	26	39	.....	186
10	20	104	148	.....	.....	24	21	10	25	12	15	.....	87
3	5	54	84	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
7	13	95	135	.....	.....	24	20	13	17	20	20	.....	89
5	14	87	137	.....	.....	24	20	.....	.....	.....	.....	.....	90
5	30	100	178	.....	.....	26	23	11	24	23	29	.....	91
8	25	87	194	.....	.....	26	21	6	10	5	16	.....	92
1	4	88	142	.....	.....	24	19	.....	.....	.....	.....	.....	93
6	4	76	151	.....	.....	27	19	15	31	10	28	.....	94
.....	.....	16	24	.....	.....	26	26	26	26	4	4	.....	95
4	9	80	187	1	.....	23	21	14	29	24	48	.....	96
10	.....	101	29	.....	.....	21	21	18	.....	28	.....	1	97
1	13	35	79	.....	.....	25	20	6	7	7	22	.....	98
.....	.....	38	55	.....	.....	24	20	10	20	.....	.....	.....	.....
884	1876	7854	13828	11	4	24.70	21.17	1005	2024	1071	1890	14	24

## ABSTRACT [D]

VISITATION OF SCHOOLS, APPEALS, ETC., 1879.

COUNTY.	VISITATION OF SCHOOLS.			AP-PEALS.	COMPEN-SATI'N OF CO. SUP'T.	PRIVATE SCHOOLS.		
	Schools visit- ed by Coun- ty Supt.	Visits made during year.	Educa'l meet- ings held.			Number.	Teachers em- ployed.	Pupils attend- ing.
1 Adair.....	86	121	7	.....	\$ 860.00	.....	.....	.....
2 Adams.....	85	130	15	.....	664.00	.....	.....	.....
3 Allamakee.....	40	40	1	.....	457.40	1	3	60
4 Appanoose.....	138	138	13	.....	852.00	.....	.....	.....
5 Audubon.....	65	175	.....	.....	855.00	.....	.....	.....
6 Benton.....	180	209	.....	.....	894.00	3	7	190
7 Black Hawk.....	95	123	1	.....	930.00	3	13	300
8 Boone.....	101	109	.....	.....	774.00	1	.....	.....
9 Bremer.....	118	334	14	.....	920.00	.....	.....	.....
10 Buchanan.....	136	204	9	.....	1,085.00	2	3	127
11 Buena Vista.....	60	70	7	.....	313.50	.....	.....	.....
12 Butler.....	147	260	11	.....	1,000.00	.....	.....	.....
13 Calhoun.....	72	157	.....	.....	550.50	.....	.....	.....
14 Carroll.....	139	198	1	.....	600.00	.....	.....	.....
15 Cass.....	146	231	4	.....	711.75	.....	.....	.....
16 Cedar.....	138	160	5	.....	1,000.00	.....	.....	.....
17 Cerro Gordo.....	108	194	13	.....	975.00	1	1	15
18 Cherokee.....	92	179	15	.....	988.50	.....	.....	.....
19 Chickasaw.....	161	180	20	.....	948.50	.....	.....	.....
20 Clarke.....	68	93	.....	.....	859.00	.....	.....	.....
21 Clay.....	64	125	3	.....	400.00	.....	.....	.....
22 Clayton.....	120	175	5	.....	1,410.00	5	8	290
23 Clinton.....	111	152	8	.....	910.50	5	8	320
24 Crawford.....	87	115	20	.....	867.00	.....	.....	.....
25 Dallas.....	140	203	16	.....	912.00	.....	.....	.....
26 Davis.....	196	208	.....	.....	900.00	2	6	140
27 Decatur.....	20	25	.....	.....	380.50	.....	.....	.....
28 Delaware.....	148	253	6	.....	962.00	3	10	260
29 Des Moines.....	95	95	1	.....	936.00	11	32	924
30 Dickinson.....	31	53	3	.....	419.00	.....	.....	.....
31 Dubuque.....	95	131	6	.....	1,252.00	23	80	2432
32 Emmet.....	15	18	.....	.....	200.00	.....	.....	.....
33 Fayette.....	139	148	1	.....	836.00	3	13	360
34 Floyd.....	96	127	16	.....	879.00	.....	.....	.....
35 Franklin.....	95	140	8	.....	936.00	.....	.....	.....
36 Fremont.....	130	218	15	.....	915.00	1	5	150
37 Greene.....	126	290	5	.....	936.00	1	5	.....
38 Grundy.....	127	152	5	.....	896.00	2	2	57
39 Guthrie.....	125	160	2	.....	900.00	1	2	50
40 Hamilton.....	96	160	12	.....	737.00	.....	.....	.....
41 Hancock.....	49	71	3	.....	500.00	.....	.....	.....
42 Hardin.....	140	184	1	.....	922.00	2	2	43
43 Harrison.....	70	82	4	.....	725.00	.....	.....	.....
44 Henry.....	100	130	1	.....	860.00	6	17	345
45 Howard.....	60	124	4	.....	780.00	1	1	20
46 Humboldt.....	60	100	4	.....	574.50	2	3	80
47 Ida.....	45	201	4	.....	620.00	.....	.....	.....
48 Iowa.....	159	215	1	.....	1,000.00	3	3	73
49 Jackson.....	166	185	10	.....	918.00	1	.....	.....
50 Jasper.....	153	155	3	.....	897.00	2	3	.....

## ABSTRACT [D]—CONTINUED.

VISITATION OF SCHOOLS, APPEALS, ETC., 1879.

COUNTY.	VISITATION OF SCHOOLS.			AP-PEALS.	COMPEN- SATION OF CO. SUP'T.	PRIVATE SCHOOLS.		
	Schools visit'd by Co. Supt.	Visits made during year.	Educa'l meet- ings held.			Cases decided by County Superin- tendent.	Received for official ser- vices from Oct. 1, '78, to Oct. 1, '79.	Number.
51 Jefferson . . . . .	117	201	4	1	\$ 846.00	2	11	183
52 Johnson . . . . .	95	95	10		900.00	3	13	430
53 Jones . . . . .	150	238		5	741.00	2	2	99
54 Keokuk . . . . .	160	240	4	5	915.00	3	5	150
55 Kossuth . . . . .	71	173	9	2	420.00	2	5	70
56 Lee . . . . .	182	360			939.00			
57 Linn . . . . .	180	200	6	3	747.50	3	31	595
58 Louisa . . . . .	93	109	3		918.00	1	11	438
59 Lucas . . . . .	80	120	4		780.00	2	3	80
60 Lyon . . . . .	46	90	1		722.36			
61 Madison . . . . .	110	200	10		934.00			
62 Mahaska . . . . .	129	160	4	2	897.00	2	11	290
63 Marion . . . . .	130	151	2		900.00	3	9	272
64 Marshall . . . . .	80	93	38		1,244.00	2	4	123
65 Mills . . . . .	95	200	3		789.00			
66 Mitchell . . . . .	63	139		1	765.75	1	5	176
67 Monona . . . . .	70	113			498.00			
68 Monroe . . . . .	93	240	10	1	870.00			
69 Montgomery . . . . .	100	175	6	1	750.00			
70 Muscatine . . . . .	146	238	10	4	1,000.00	1	3	35
71 O'Brien . . . . .	61	162	3		596.90			
72 Osceola . . . . .	76	84		1	417.00			
73 Page . . . . .	117	117	1	1	758.52	1	4	99
74 Palo Alto . . . . .	57	84			370.00			
75 Plymouth . . . . .	85	127	1	1	600.00	1	3	90
76 Pocahontas . . . . .	63	85	6	1	297.00			
77 Polk . . . . .	200	229	2		936.00	7	2	175
78 Pottawattamie . . . . .	180	240		6	800.00	2	8	174
79 Poweshiek . . . . .	30	30	4	1	800.00	1		
80 Ringgold . . . . .	121	188		1	680.00			
81 Sac . . . . .	192	205	12		384.00	1	1	47
82 Scott . . . . .	119	223	7	1	1,056.00	10	54	1908
83 Shelby . . . . .	90	129		2	783.00			
84 Sioux . . . . .	113	123	5	1	410.00			
85 Story . . . . .	184	193	4	2	951.00	1	24	297
86 Tama . . . . .	171	296	4	1	1,005.00			
87 Taylor . . . . .	130	140	18		671.00	1	2	50
88 Union . . . . .	98	125	6	1	920.00			
89 Van Buren . . . . .	109	129	4	1	939.00	1	3	30
90 Wapello . . . . .	125	150	1		925.00	4	8	241
91 Warren . . . . .	82	95		1	876.00	2	7	159
92 Washington . . . . .	126	126	1		912.00	2	6	210
93 Wayne . . . . .	112	170	10		840.00	1	3	60
94 Webster . . . . .	85	85			450.00	1	5	300
95 Winnebago . . . . .	40	80	3		300.00			
96 Winneshiek . . . . .	142	167	8		1,232.00	6	24	681
97 Woodbury . . . . .	60	78		1	757.23			
98 Worth . . . . .	63	129			517.70			
99 Wright . . . . .	66	150	2	4	750.00			
	10520	15374	529	101	\$ 78,129.61	154	494	13698

## ABSTRACT [E]

## TEACHERS'

COUNTY.	WHERE HELD.	TIME.		TEACHERS IN ATTENDANCE.		
		Commenc- ing.	Continuing weeks.	Males.	Females.	Total.
1 Adair .....	Greenfield.....	Mar. 10	4	47	111	158
2 Adams.....	Corning.....	Aug. 4	3	18	49	67
3 Allamakee .....	Waukon.....	Aug. 12	3	16	86	102
4 Appanoose .....	Centerville.....	Aug. 4	3	46	76	122
5 Audubon .....	Exira .....	Aug. 4	3	26	55	81
6 Benton.....	Vinton .....	Aug. 4	4	83	178	261
7 Black Hawk .....	Waterloo.....	Aug. 11	3	28	104	132
8 Boone .....	Boone .....	Aug. 18	2	25	108	133
9 Bremer .....	Waverly.....	Aug. 4	4	28	120	148
10 Buchanan.....	Independence....	Aug. 4	7	36	144	180
11 Buena Vista .....	Storm Lake.....	Aug. 11	3	8	19	27
12 Butler .....	Shell Rock.....	Aug. 11	3	46	98	144
13 Calhoun .....	Manson .....	Sept. 29	3	17	34	51
14 Carroll .....	Carroll City.....	Sept. 18	3	44	56	100
15 Cass .....	Atlantic .....	July 28	4	29	97	126
16 Cedar .....	Tipton .....	July 28	4	34	97	131
17 Cerro Gordo.....	Mason City .....	Aug. 25	3	23	68	91
18 Cherokee .....	Cherokee .....	Mar. 31	2	26	56	82
19 Chickasaw .....	New Hampton....	Mar. 17	3	36	96	132
20 Clarke .....	Osceola.....	Aug. 11	3	19	78	97
21 Clay .....	Spencer.....	Aug. 18	3	10	46	56
22 Clayton .....	Elkader.....	Aug. 4	3	25	106	131
23 Clinton .....	Lyons .....	July 14	3	14	119	133
24 Crawford .....	Denison .....	Aug. 18	3	37	50	87
25 Dallas .....	Adel .....	Aug. 18	4	78	126	204
26 Davis .....	Bloomfield.....	Aug. 4	3	45	73	118
27 Decatur.....	Leon .....	July 21	4	21	96	117
28 Delaware .....	Manchester.....	Aug. 11	3	69	208	277
29 Des Moines.....	Burlington.....	July 7	3	9	57	66
30 Dickinson.....	Spirit Lake .....	Mar. 17	3	12	32	44
31 Dubuque.....	Dubuque .....	Aug. 11	3	19	119	138
32 Emmet .....	Estherville.....	Aug. 25	2	15	17	32
33 Fayette .....	West Union.....	Aug. 25	2	42	136	178
34 Floyd .....	Charles City .....	Aug. 18	3	31	144	175
35 Franklin.....	Hampton .....	Aug. 4	3	19	84	103
36 Fremont .....	Sidney .....	July 28	3	55	90	145
37 Greene .....	Jefferson.....	July 28	4	51	130	181
38 Grundy .....	Grundy Center....	Aug. 18	4	32	84	116
39 Guthrie .....	Guthrie Center....	Aug. 4	3	40	105	145
40 Hamilton .....	Callanan .....	Jan. 3	1	24	84	108
41 Hancock .....	Garner .....	Sept. 25	4	8	35	43
42 Hardin .....	Alden .....	Aug. 18	4	41	94	135
43 Harrison.....	Logan .....	July 7	2	30	71	101
44 Henry .....	Mt. Pleasant.....	Aug. 4	3	48	136	184
45 Howard .....	Cresco .....	Mar. 31	5	25	78	103
46 Humboldt.....	Humboldt .....	Oct. 6	3	12	44	56
47 Ida .....	Ida Grove.....	Aug. 18	2	10	23	33
48 Iowa.....	Marengo .....	Aug. 11	3	26	108	134
49 Jackson.....	Maquoketa.....	Aug. 18	2	61	126	187
50 Jasper.....	Newton.....	July 28	4	94	117	311



## REPORTS FOR 1879.

## NORMAL INSTITUTES.

INSTITUTE FUND.									
RECEIPTS.					EXPENDITURES.				
On hand at last rept.	Examina- tion fees.				Total.	Instruction.	Incidentals.	Unexpended	Total.
17.80	166				192.50	345.00	47.50		392.50
81.50	177	67	50		311.80	197.50	52.80	61.50	311.80
49.95	250	102	50		483.50	306.00	35.03	142.47	483.50
	241	122	50	.10	463.05	290.00	78.50	94.55	463.05
	91	81	50	13.00	235.00	225.91	9.09		235.00
450.37	159	*58	50		942.37	481.00	71.55	409.82	942.37
407.18	312	132	50		901.18	380.00	60.70	460.48	901.18
51.88	290	133	50		524.88	320.00	83.25	121.63	524.88
484.83	208	148	50		888.83	335.00	72.75	481.08	888.83
88.50	240	180	50	.34	558.84	455.00	30.50	73.34	558.84
80.68	88	27	50		245.68	199.00	46.50	.18	245.68
54.65	298	144	50		540.65	432.25	24.20	84.20	540.65
92.92	99	51	50		292.92	205.00	22.88	65.04	292.92
3.00	120	100	50		273.00	230.00	42.80	.20	273.00
60.25	242	126	50		478.25	350.00	28.85	99.60	478.25
1.15	267	131	50	99.65	548.80	505.00	43.80		548.80
11.34	168	91	50		320.34	319.34		1.00	320.34
46.68	119	82	50		297.68	120.00	8.00	169.68	297.68
227.80	187	132	50		596.80	320.00	95.60	181.20	596.80
46.75	90	97	50	.35	284.60	245.00	19.00	20.60	284.60
62.39	107	56	50		275.39	190.00	56.83	28.56	275.39
123.00	271	131	50		575.00	410.00	70.70	94.30	575.00
354.85	303	133	50		840.85	400.00	107.63	333.22	840.85
139.70	97	87	50		373.70	235.00	98.55	45.15	373.70
87.05	240	204	50		531.05	362.00	131.00	38.05	531.05
1.13	196	118	50		365.13	248.00	105.13	12.00	365.13
64.15	154	117	50		385.15	314.00	24.60	46.55	385.15
4.35	358	277	50		689.35	599.14	83.92	6.29	689.35
90.00	287	66	50		493.00	307.75	45.85	139.40	493.00
	14	44	50	50.00	158.00	124.01	23.55	10.44	158.00
3.75	246	138	50		437.75	300.00	78.95	58.80	437.75
	57	32	50		139.00	100.00	25.00	14.00	139.00
16.65	161	178	50	.60	406.25	329.00	39.00	38.25	406.25
190.76	257	175	50		672.76	360.00	23.81	288.95	672.76
	142	108	50	3.50	298.50	191.00	72.70	34.80	298.50
100.00	198	145	50		493.00	365.00	60.00	68.00	493.00
	241	181	50		472.00	470.00	2.00		472.00
382.90	208	116	50		756.90	348.75	81.00	327.15	756.90
45.35	248	145	50		488.35	320.00	73.40	94.95	488.35
.63	173	108	50		331.63	236.00	94.97	.66	331.63
33.15	113	43	50		239.15	148.00	13.00	78.15	239.15
318.84	390	135	50		893.84	344.50	41.50	507.84	893.84
313.24	277	101	50		741.24	262.00	15.28	463.96	741.24
52.00	223	184	50	.65	509.65	342.00	32.60	135.05	509.65
5.12	57	103	50	.13	216.95	185.00	31.50	.45	216.95
151.05	90	56	50		347.05	203.00	29.40	114.65	347.05
	61	33	50		144.00	144.00			144.00
54.60	310	184	50		548.60	300.00	89.00	159.60	548.60
190.25	341	187	50		768.25	344.25	247.65	176.32	768.25
843.88	512	311	50		1216.88	750.00	108.70	578.18	1216.88

\*The balance, \$296, was remitted to those who had formerly contributed.

## ABSTRACT [E]—CONTINUED.

## TEACHERS'

COUNTY.	WHERE HELD.	TIME.		TEACHERS IN ATTENDANCE.		
		Commenc- ing.	Continuing weeks.	Males.	Females.	Total.
51 Jefferson.....	Fairfield.....	July 23	4	48	97	145
52 Johnson.....	Iowa City.....	Aug. 11	3	39	155	194
53 Jones.....	Wyoming.....	Aug. 11	2	35	75	110
54 Keokuk.....	Sigourney.....	Aug. 4	4	66	133	199
55 Kossuth.....	Algona.....	Sept. 1	2	24	66	90
56 Lee.....	Fort Madison....	Aug. 18	2	9	32	41
57 Linn.....	Marion.....	Aug. 11	3	38	195	233
58 Louisa.....	Wapello.....	July 14	4	27	67	94
59 Lucas.....	Chariton.....	Aug. 4	4	32	68	100
60 Lyon.....	Rock Rapids.....	Aug. 25	2	8	17	25
61 Madison.....	Winterset.....	Aug. 11	4	47	128	175
62 Mahaska.....	Oskaloosa.....	July 28	4	63	203	266
63 Marion.....	Knoxville.....	Aug. 11	2	18	52	70
64 Marshall.....	Marshalltown ...	Aug. 11	3	62	140	202
65 Mills.....	Glenwood.....	Aug. 18	2	29	99	128
66 Mitchell.....	Osage.....	Aug. 25	3	12	44	56
67 Monona.....	Onawa City.....	Aug. 11	2	28	60	88
68 Monroe.....	Albia.....	Aug. 4	4	22	47	69
69 Montgomery.....	Red Oak.....	Aug. 4	3	34	67	101
70 Muscatine.....	Muscatine.....	Aug. 4	3	26	116	142
71 O'Brien.....	Pringhar.....	Oct. 20	2	23	31	54
72 Osceola.....	Sibley.....	April 1	2	8	36	44
73 Page.....	Clarinda.....	Aug. 4	4	55	140	195
74 Palo Alto.....	Emmetsburg.....	Sept. 15	3	8	44	52
75 Plymouth.....	Lemars.....	Aug. 11	3	19	34	53
76 Pocahontas.....	Pocahontas Cent'r	Oct. 20	3	12	18	30
77 Polk.....	Des Moines.....	July 14	3	19	119	138
78 Pottawattamie.....	Council Bluffs ...	July 21	4	56	121	177
79 Poweshiek.....	Brooklyn.....	Aug. 4	4	55	122	177
80 Ringgold.....	Mt. Ayr.....	Aug. 11	4	36	111	147
81 Sac.....	Sac City.....	Aug. 11	3	7	38	45
82 Scott.....	Davenport.....	July 28	3	58	114	172
83 Shelby.....	Harlan.....	Aug. 18	4	37	71	108
84 Sioux.....	Orange City.....	Sept. 1	2	23	22	45
85 Story.....	Nevada.....	Aug. 4	3	47	83	130
86 Tama.....	Toledo.....	Aug. 11	4	58	125	183
87 Taylor.....	Bedford.....	Aug. 4	4	48	92	140
88 Union.....	Afton.....	Aug. 11	3	38	82	120
89 Van Buren.....	Keosauqua.....	Aug. 4	4	78	133	211
90 Wapello.....	Ottumwa.....	Aug. 4	3	25	81	106
91 Warren.....	Indianola.....	July 21	3	29	86	115
92 Washington.....	Washington.....	Aug. 11	3	45	147	192
93 Wayne.....	Corydon.....	Aug. 11	4	28	48	76
94 Webster.....	Fort Dodge.....	Aug. 4	3	20	100	120
95 Winnebago.....	Forest City.....	Sept. 1	2	12	20	32
96 Winneshiek.....	Decorah.....	Mar. 31	2	38	121	159
97 Woodbury.....	Sioux City.....	Aug. 5	3	20	67	87
98 Worth.....	Northwood.....	April 17	3	13	43	56
99 Wright.....	Clarion.....	Sept. 22	2	20	33	53
Total.....			3.08	3240	8711	11951



REPORTS FOR 1879.

NORMAL INSTITUTES.

INSTITUTE FUND.										
RECEIPTS.						EXPENDITURES.				
On hand at last report.	Examina- tion fees.	Registrati'n fees.	State appro- priation.	Sundries.	Total.	Instruction.	Incidentals.	Unexpend- ed.	Total.	
\$ 60.60	\$ 206	\$ 145	\$ 50	\$ . . . .	\$ 461.60	\$ 345.00	\$ 33.05	\$ 83.55	\$ 461.60	51
17.00	360	194	50	. . . . .	621.00	486.00	134.25	.75	621.00	52
. . . . .	146	110	50	. . . . .	306.00	200.00	86.00	20.00	306.00	53
160.95	300	199	50	. . . . .	709.95	470.50	84.40	155.05	709.95	54
4.00	80	90	50	2.00	226.00	205.00	21.00	. . . . .	226.00	55
. . . . .	201	41	50	. . . . .	292.00	249.00	36.00	7.00	292.00	56
107.25	428	233	50	. . . . .	818.25	630.00	52.50	135.75	818.25	57
88.45	250	94	50	. . . . .	482.45	426.00	54.35	2.10	482.45	58
58.30	186	100	50	2.00	396.30	251.00	49.75	95.55	396.30	59
. . . . .	53	25	50	42.00	170.00	165.00	5.00	. . . . .	170.00	60
159.40	233	175	50	. . . . .	617.40	295.00	61.50	260.90	617.40	61
317.90	359	266	50	. . . . .	992.90	540.50	117.45	334.95	929.90	62
44.00	189	70	50	. . . . .	353.00	181.75	47.70	123.55	353.00	63
. . . . .	331	202	50	29.66	612.66	457.16	155.50	. . . . .	612.66	64
16.60	178	128	50	. . . . .	372.60	330.00	33.20	9.40	372.60	65
3.02	294	56	50	. . . . .	403.02	265.00	18.20	119.82	403.02	66
2.41	141	88	50	. . . . .	281.41	233.00	33.00	15.41	281.41	67
19.40	162	69	50	. . . . .	300.40	245.00	55.00	.40	300.40	68
70.26	162	101	50	. . . . .	383.26	262.50	10.00	110.76	383.26	69
28.00	220	142	50	. . . . .	440.00	365.00	23.00	52.00	440.00	70
39.78	50	54	50	. . . . .	193.78	100.00	28.70	65.08	193.78	71
1.00	54	44	50	. . . . .	149.00	130.00	9.25	9.75	149.00	72
142.50	324	195	50	10.90	722.40	477.50	58.60	186.30	722.40	73
17.80	56	52	50	35.97	211.77	161.00	34.95	15.82	211.77	74
7.80	201	53	50	. . . . .	311.80	245.00	31.50	35.30	311.80	75
38.65	110	30	50	. . . . .	228.65	120.00	17.25	91.40	228.65	76
147.50	186	138	50	.50	522.00	380.00	24.12	117.88	522.00	77
197.70	360	177	50	. . . . .	784.70	347.00	63.10	374.60	784.70	78
119.27	316	177	50	14.00	676.27	566.00	23.00	87.27	676.27	79
8.23	236	147	50	. . . . .	441.23	398.00	10.75	32.48	441.23	80
370.06	91	45	50	. . . . .	556.06	100.00	15.00	441.06	556.06	81
27.67	281	172	50	. . . . .	530.67	485.00	42.00	3.67	530.67	82
48.70	225	108	50	. . . . .	431.70	274.00	26.00	131.70	431.70	83
96.25	78	45	50	. . . . .	269.25	119.00	21.10	129.15	269.25	84
297.40	337	130	50	. . . . .	814.40	325.50	75.38	413.52	814.40	85
161.46	361	183	50	49.50	804.96	610.00	67.59	127.37	804.96	86
328.96	206	140	50	. . . . .	724.96	367.50	30.00	327.46	724.96	87
9.27	101	120	50	.73	281.00	267.92	13.08	. . . . .	281.00	88
128.68	210	211	50	9.00	608.68	347.78	131.68	129.22	608.68	89
2.23	193	106	50	. . . . .	351.23	312.50	38.20	.53	351.23	90
277.35	243	115	50	. . . . .	685.35	260.00	120.25	305.10	685.35	91
101.15	293	192	50	. . . . .	636.15	301.00	95.05	240.10	636.15	92
11.65	203	76	50	15.56	356.21	234.00	37.85	84.36	356.21	93
4.34	194	120	50	. . . . .	368.34	295.00	70.15	3.19	368.34	94
38.65	40	32	50	. . . . .	160.65	102.00	53.65	5.00	160.65	95
56.71	198	159	50	4.75	468.46	425.00	29.55	13.91	468.46	96
46.62	126	87	50	. . . . .	309.62	157.00	82.90	69.72	309.62	97
84.75	80	56	50	. . . . .	270.75	224.00	18.90	27.85	270.75	98
117.65	94	53	50	. . . . .	314.65	122.00	118.80	73.85	314.65	99
9419.02	20295	11746	4950	403.69	46813.91	30109.51	5274.55	11429.85	46813.91	

## ABSTRACT [E]—CONTINUED.

## TEACHERS'

COUNTY.	CONDUCTOR.	ASSISTANT INSTRUCTORS.
1 Adair .....	D. G. Perkins.....	I. H. DeWolf, Miss Abbie Gifford.....
2 Adams .....	R. G. Gilson.....	L. D. Wooley, Mrs. E. Hulbert, E. A. G. Karnes.....
3 Allamakee .....	J. Loughran .....	A. Row, Miss A. E. Bucklin, J. Tucker, M. Harmon, J. W. Hinchon.....
4 Appanoose.....	D. R. Guernsey .....	F. E. Stephens, E. B. Howell, A. F. Stolebarger, M. E. Barry, L. McLoughlin.....
5 Audubon.....	A. E. Clarendon.....	D. G. Perkins, M. Gibney, G. O. Miller, A. K. Brainard.
6 Benton.....	Miss S. Blackburn.....	J. McCarty, Mrs. N. M. Rich, Mary E. Wilson, W. N. Hull.....
7 Black Hawk .....	J. S. George.....	D. S. Wright, J. McNaughton, J. K. Sweeney, W. H. Butler, Miss E. Wright.....
8 Boone .....	H. E. Hammond .....	N. E. Goldthwait, W. P. Todd, Miss S. C. Thomas, Miss E. J. Couch.....
9 Bremer ....	D. O. Chamberlin.....	J. Breckenridge, A. W. Rich, C. N. Hunt, W. W. Andrews.....
10 Buchanan ..	W. E. Parker.....	W. Elden, W. H. Robertson, J. Piper, Miss M. Murdock, E. H. Ely.....
11 Buena Vista .....	P. H. Conley.....	Mrs. G. S. Robinson.....
12 Butler .....	J. Hannan.....	J. Piper, Leigh Hunt, O. N. Hunt, J. W. Stewart....
13 Calhoun .....	J. Wernli.....	L. L. Taylor.....
14 Carroll.....	W. E. Crosby.....	Mrs. M. T. Hatch, I. H. DeWolf, J. M. Mehan, C. H. Gabriel.....
15 Cass.....	G. S. Wedgwood.....	Mrs. M. F. Goehard, Mrs. J. S. Frost.....
16 Cedar .....	J. Valentine.....	Miss L. Curtis, E. W. Craven, Lida Hanna.....
17 Cerro Gordo .....	Miss L. Curtis.....	J. F. Grawe, Miss C. A. Bassett.....
18 Cherokee .....	J. S. Weaver.....	O. P. Bowman.....
19 Chickasaw .....	W. D. Collins.....	J. Breckenridge, Miss C. A. Bassett, D. K. Bond, W. N. Hull.....
20 Clarke.....	B. F. Hood.....	R. Turney, J. R. Foulks.....
21 Clay .....	S. Gillespie.....	J. C. Gilchrist, Maud Gilchrist.....
22 Clayton.....	R. G. Saunderson.....	J. F. Thompson, C. P. Clark, C. Cressey.....
23 Clinton.....	H. Sabin.....	Julia J. Sweet, Mary J. Bolce.....
24 Crawford.....	J. D. Hornby.....	G. N. Vanwormer.....
25 Dallas .....	M. E. Phillips.....	O. M. Pinkerton, J. F. Curran.....
26 Davis .....	O. A. Shotts.....	A. H. Conrad, D. W. Hastings, H. A. Boorse, A. H. Dunlavy.....
27 Decatur.....	Miss J. Kellogg.....	R. A. Harkness, O. M. Des Islets, T. J. Hasty, Miss L. V. Dye.....
28 Delaware .....	R. M. Ewart.....	L. Lewis, W. J. Shoup, S. N. Fellows, C. D. Clark, H. E. Stetson.....
29 Des Moines.....	R. G. Saunderson.....	W. J. Samson, O. A. Lisle, B. L. Saum.....
30 Dickinson .....	J. Wernli.....	H. C. Crary, R. B. Nicol.....
31 Dubuque.....	A. L. Free.....	E. R. Free, A. L. Shattuck, W. M. Cross, P. H. Brad- bury.....
32 Emmet .....	D. D. Ford.....	R. I. Cratty, R. A. Sanders, Frank Davey.....
33 Fayette .....	L. T. Weld.....	R. S. Holway, Mr. & Mrs. W. W. Quivey, G. Brousseau.
34 Floyd .....	T. H. Smith.....	J. C. Yocum, H. H. Davidson, A. E. Hitchcock, T. R. Hamlin.....
35 Franklin .....	J. W. Myers.....	W. B. Waterbury, Miss S. J. Dexter, Mrs. W. H. Sisson, Miss E. Stickney.....
36 Fremont .....	G. S. Houghton.....	E. J. H. Beard, Miss L. A. Dimon, A. S. Tibbets.....
37 Greene .....	H. A. Turrill.....	A. G. Riley, J. M. Mehan, Miss S. L. Stilson, Miss E. Child.....
38 Grundy ..	G. T. Cowgill.....	C. C. Delle, T. Palmer, Mrs. A. B. Billington, S. D. Gaylord.....
39 Guthrie .....	M. E. Phillips.....	F. T. Lyon, J. H. Robinson, T. J. Mahoney.....
40 Hamilton.....	E. R. Eldridge.....	A. H. Sniff.....
41 Hancock .....	W. F. Barclay.....	.....
42 Hardin .....	J. W. Stephens.....	A. A. Weaver, M. Reece, D. A. Hamm, L. S. McCoy ..
43 Harrison ..	J. Wernli.....	S. G. Rogers, H. A. Kinney.....
44 Henry.....	A. M. Linn.....	O. P. Howe, Anna E. Packer, Belle A. Mansfield, S. O. Howe.....
45 Howard .....	L. T. Weld.....	J. Breckenridge.....
46 Humboldt.....	J. A. Marvin.....	E. Baker.....
47 Ida .....	T. S. Snell.....	J. S. Weaver, C. P. Bowman.....
48 Iowa .....	R. S. Bingham.....	E. M. Ladd, W. D. Evans.....
49 Jackson.....	H. L. Boltwood.....	J. R. Bowman, Miss M. O'Key, Miss S. D. Stewart...
50 Jasper.....	E. Baker.....	R. G. Young, Miss Abbie Gifford.....

REPORTS FOR 1879.

NORMAL INSTITUTES.

LECTURERS.	
J. Piper, Mr. Marshall.....	1
.....	2
.....	3
L. M. Belden, R. Stephenson, Jr., N. Udell, H. E. Wing ...	4
.....	5
C. W. von Coelln, W. H. Stifler, S. P. Leland.....	6
C. W. von Coelln .....	7
J. A. Nash, W. P. Payne, G. W. Lloyd.....	8
C. W. von Coelln, G. W. Ruddick, B. C. Hammond, C. F. Barclay, E. H. Sayre.....	9
N. Bateman, J. L. Pickard, E. R. Eldridge, Dr. Hodge.....	10
P. H. Conley.....	11
C. W. von Coelln, J. Piper, J. Hannan, Leigh Hunt.....	12
C. W. von Coelln, J. Wernli, R. M. Wright.....	13
C. W. von Coelln, Mr. and Mrs. Hatch, J. C. Scott.....	14
G. S. Wedgwood .....	15
B. D. Parsons, J. M. Scott, J. Valentine.....	16
S. P. Leland, A. C. Hart, E. O. Moulton.....	17
J. S. Weaver .....	18
J. Baldwin, W. B. Perrin, W. S. Pitts, W. E. Crosby.....	19
J. A. Woodbury, M. L. Temple, B. F. Mace, J. Wheeler .....	20
C. W. von Coelln, J. O. Gilchrist, J. R. Effinger .....	21
R. G. Saunderson, S. G. Smith .....	22
H. Sabin, Dr. Mullett .....	23
Alonzo Abernethy, J. Fred. Meyers.....	24
R. Elsworth Call.....	25
C. W. von Coelln, O. A. Shotts, E. K. Shelton .....	26
C. W. von Coelln, J. Piper, R. A. Harkness, C. M. Des Islets, H. R. Layton, Newton Bateman...	27
Newton Bateman, J. L. Pickard, S. N. Fellows, A. S. Kissell, S. Hodge.....	28
.....	29
C. W. von Coelln, J. Wernli. ....	30
C. W. von Coelln, J. W. Akers, Rev. Judd.....	31
C. W. von Coelln, D. D. Ford ..	32
S. P. Leland, W. O. Ruston, J. B. Hobson, J. Piper.....	33
C. W. von Coelln, S. P. Leland.....	34
C. W. von Coelln, G. L. Pinkham .....	35
J. Baldwin, J. Allender.....	36
C. W. von Coelln, J. Piper, Miss S. L. Stillson.....	37
C. W. von Coelln, W. F. Barclay, L. F. Parker, T. B. Cowgill.....	38
M. E. Phillips.....	39
C. W. von Coelln, E. R. Eldridge, J. L. Pickard, B. I. Salinger.....	40
C. W. von Coelln, S. P. Leland, W. F. Barclay, B. F. Nadal .....	41
C. W. von Coelln, S. P. Leland, C. Dale Armstrong, A. Countryman....	42
C. W. von Coelln, J. Wernli....	43
L. Hunt, W. Beattie, W. Hart, J. Wheeler.....	44
C. W. von Coelln, S. G. Smith, A. S. McConnel....	45
C. W. von Coelln, E. Baker, J. O. Gilchrist, D. D. Ford.....	46
C. W. von Coelln, J. S. Weaver.....	47
J. W. Akers, C. A. Eggert .....	48
J. L. Pickard, Mrs. L. F. Curry, J. B. Young, J. M. De Armond, Mrs. A. R. Darling.....	49
C. W. von Coelln.....	50

## ABSTRACT [E]—CONTINUED.

## TEACHERS'

COUNTY.	CONDUCTOR.	INSTRUCTORS.
51 Jefferson .....	S. T. Boyd .....	J. Rogers, J. H. Carse, A. J. Sheridan, G. W. Williams
52 Johnson .....	A. A. Guthrie .....	J. C. Armentrout, Annie E. De Sellum .....
53 Jones .....	O. E. Aldrich .....	L. T. Weld, L. Foster, Miss Kate Curtis, W. W. Moore
54 Keokuk .....	H. D. Todd .....	G. T. Carpenter, E. R. Eldridge, M. Gibney, J. J. Pollard .....
55 Kossuth .....	E. R. Eldridge .....	A. G. Neff, G. Schenck .....
56 Lee .....	N. C. Campbell .....	N. Messer .....
57 Linn .....	J. W. McClellan .....	H. H. Freer, J. W. Akers, Mrs. H. McClellan .....
58 Louisa .....	D. Helmick .....	R. B. Huff, H. C. Hollingsworth, Lottie C. Bogen .....
59 Lucas .....	L. M. Hastings .....	Mrs. R. A. Stewart, O. E. Shelton .....
60 Lyon .....	H. F. Green .....	Kate N. Tupper, J. F. Thompson .....
61 Madison .....	O. C. Cory .....	S. M. Mowatt, R. M. Goshorn .....
62 Mahaska .....	H. H. Seerley .....	G. H. Laughlin, J. J. McCounell, M. P. Givens .....
63 Marion .....	S. J. Buck .....	J. H. Applegate, J. W. Johnson .....
64 Marshall .....	C. P. Rogers .....	J. B. Jennings, E. P. Fogg, L. Hanna, W. W. Speer ..
65 Mills .....	E. Baker .....	W. L. Long, W. M. Moore, J. A. McLean, Emily Davis
65 Mitchell .....	A. Bush .....	D. F. Call, J. F. Clyde, Miss E. Thompson .....
67 Monona .....	H. Sabin .....	O. H. Brainard, Miss M. E. Edwards .....
68 Monroe .....	A. J. Casaday .....	A. C. Ross, J. K. Pickett, Mary E. Shahan .....
69 Montgomery .....	W. P. Pattison .....	E. A. Haight, W. C. Davis, C. W. Gurney .....
70 Muscatine .....	F. M. Witter .....	G. S. Bradley, Miss E. Reeves, Miss C. Lillibridge ...
71 O'Brien .....	J. Wernli .....	J. Wernli, H. Neill .....
72 Osceola .....	Mrs. W. L. Parker .....	J. Baldwin, J. A. Woods, A. Grimes, W. R. Colecott.
73 Page .....	E. Miller .....	A. T. Pieroy, B. F. Natal .....
74 Palo Alto .....	E. R. Eldridge .....	S. G. Rogers, Minerva Guernsey .....
75 Plymouth .....	J. Wernli .....	O. I. Stroug .....
76 Pocahontas .....	Miss A. Gifford .....	T. H. Smith, Miss M. Gray, J. W. King, E. H. East-
77 Polk .....	L. T. Weld .....	man .....
78 Pottawattamie ...	G. W. Cullison .....	A. B. Warner, W. Leeben, G. W. Krall .....
79 Poweshiek ...	N. W. Boyes .....	C. G. Kretschmer, O. A. Brownson, T. M. Irish, W. J. Shoup .....
80 Ringgold .....	R. A. Harkness .....	W. E. Andrews, G. A. Slentz, J. W. White .....
81 Sac .....	D. J. McDaid .....	J. Darling .....
82 Scott .....	C. H. Clemmer .....	J. E. Fobisher, J. R. Bowman, L. A. Rose, H. P. Lewis .....
83 Shelby .....	G. W. Cullison .....	W. W. Girton, Miss F. Girton .....
84 Sioux .....	J. H. Kleinhansel .....	J. Kolrood, Miss S. Clark .....
85 Story .....	W. P. Payne .....	O. C. Chamberlain, Mrs. A. M. Payne, G. S. Fox .....
86 Tama .....	H. A. Brown .....	J. J. Andrews, W. Clark, W. H. Brinkerhoff, W. H. Black .....
87 Taylor .....	J. B. Owens .....	W. W. Wiley, J. C. Kerr, T. G. Woods, O. Campbell, Miss L. Murphy .....
88 Union .....	J. D. Thomas .....	C. B. Stays, C. M. Grumbling, F. Lester .....
89 Van Buren .....	J. H. Landes .....	Cora E. Letts .....
90 Wapello .....	A. W. Stuart .....	G. W. Buckner, Miss E. Bell, Miss M. A. Roberts .....
91 Warren .....	J. D. Hornby .....	Mrs. M. A. Peck .....
92 Washington .....	D. W. Lewis .....	Mrs. M. J. Lewis, Miss M. A. Roberts, W. F. Cramer
93 Wayne .....	A. B. Warner .....	G. W. Samson .....
94 Webster .....	A. N. Ozias .....	M. F. Arey, Mrs. A. N. Ozias .....
95 Winnebago .....	M. M. Gilchrist .....	H. A. Botsford, D. A. Hanna, H. L. Coffeen, J. S. Tucker .....
96 Winneshiek .....	N. Kessey .....	J. S. Shoup, Miss C. A. Bassett, O. P. Bowman, M. A. Abernethy .....
97 Woodbury .....	S. Rogers .....	J. C. Gilchrist, H. T. Toy .....
98 Worth .....	M. F. Varney .....	Rev. Whited .....
99 Wright .....	E. Baker .....	

## REPORTS FOR 1879.

## NORMAL INSTITUTES.

LECTURERS.	
J. Wheeler, Rev. Hochuly .....	51
C. W. von Coelln, J. L. Pickard, W. Emmons .....	52
C. W. von Coelln, J. L. Pickard .....	53
E. R. Eldridge, G. T. Carpenter, J. Wheeler .....	54
E. R. Eldridge, S. P. Leland .....	55
C. W. von Coelln .....	56
J. W. Akers, Miss E. J. Meade, N. A. Hull .....	57
J. C. Gilchrist, S. N. Fellows, J. Baldwin, C. F. Williams .....	58
C. W. von Coelln, J. Wheeler, J. Piper, D. M. Baker .....	59
J. F. Thompson, Kate N. Tupper .....	60
J. Piper, R. E. Call .....	61
Dr. Dunn, Ella J. Meade, J. M. De Armond, S. J. Buck, E. R. Eldridge .....	62
S. J. Buck, Mr. Schemerhorn, A. J. Yetter .....	63
J. Baldwin, E. L. Hill, R. L. Herbert .....	64
C. W. von Coelln, H. Sabin .....	65
G. T. Carpenter .....	66
J. Piper, J. Baldwin, Mr. Allender .....	67
Z. King .....	68
J. Wernli .....	69
C. W. von Coelln, Miss O. A. Bassett, J. Wernli .....	70
J. Baldwin .....	71
C. W. von Coelln, S. P. Leland .....	72
O. I. Strong .....	73
A. S. Welch, J. Baldwin, J. Piper .....	74
C. W. von Coelln .....	75
D. R. Fox, H. H. Ragan, W. J. Shoup, B. W. Poor, R. S. Collier, Miss C. Wilder .....	76
C. W. von Coelln, J. H. Tedford, U. P. Golliday .....	77
C. W. von Coelln, C. H. Clemmer, H. P. Lewis, G. W. Heywood, C. H. Kellogg .....	78
C. W. von Coelln, J. A. Nash, Ella J. Meade .....	79
J. H. Kleinheksel, E. O. Plumba, S. Kuyper .....	80
E. Chase, L. F. Parker .....	81
C. W. von Coelln, L. F. Parker, S. P. Leland, W. F. Barclay, Miss E. J. Meade .....	82
W. W. Wylie, Rev. Blodgett, Rev. McKinley .....	83
C. W. von Coelln, Rev. McStuart .....	84
C. W. von Coelln, J. Piper .....	85
Miss E. J. Meade, J. Baldwin, Rev. McDonald, H. C. Hollingsworth .....	86
C. W. von Coelln .....	87
J. Wheeler .....	88
J. W. Barnard, G. W. Samson .....	89
C. W. von Coelln, J. Stevens, C. ? Carpenter .....	90
C. A. M. Spencer, M. Cooper, A. H. Chase, J. M. Hull, E. Anderson .....	91
C. W. von Coelln, J. L. Pickard, H. B. Woodworth, S. G. Smith, H. A. Bottsford .....	92
H. L. Pearsall, Mrs. L. H. Boehmler .....	93
C. W. von Coelln, J. C. Gilchrist, W. E. Crosby, J. M. Hull, J. S. Crawford .....	94
C. W. von Coelln, E. Baker, C. F. Peterson .....	95

## ABSTRACT [F]

REPORTS FOR 1879.

GRADED SCHOOLS.

SUPERINTENDENT OR PRINCIPAL.		NAME.		Salary per annum.		FOREIGN LANGUAGES TAUGHT.	
Adair	Fontanelle	40 J. B. Rhodes	1	\$	600		
Adair	Greenfield	40 J. A. Story	2		600		
Adams	Corning	50 R. G. Gilson	4		900		
Adams	Nodaway	33 L. D. Worley	1		500		
Adams	Quincy	35 J. H. Leckliter	1		500		
Adams	Brooks	30 Emma Osborne	1		400		
Adams	Prescott No. 4	35 H. M. Towne	1		400		
Allamakee	Waukon	28 D. Judson	3		900		
Allamakee	Pockville	33 A. Row	3		675		
Allamakee	Lansing	32 W. A. Gibbons	7		1,000		
Appanoose	Centerville	38 G. W. Guthrie	4		800		
Appanoose	Cluckman	25 G. W. Bryan	1		800		
Appanoose	Moulton	27 T. C. Campbell	4		800		
Benton	Vinton	40 H. M. Hoon	11		1,000	German	
Benton	Belle Plaine	31 A. E. Everest	6		750	German	
Benton	Shellsburg	30 J. H. Helm	3		540		
Black Hawk	Cedar Falls	35 A. H. Sniff	3		540		
Black Hawk	East Waterloo	35 J. McNaughton	10		1,800	Latin	
Black Hawk	La Porte City	30 J. K. Sweeney	5		1,200	Latin and German	
Black Hawk	Waterloo	35 W. H. Butler	5		675		
Boone	Boone	44 W. H. Robertson	10		1,100	Latin and German	
Boone	Boonsboro	40 W. P. Todd	11		1,000	Latin	
Boone	Moulton	32 G. W. Ashton	5		525		
Boone	Ogden	25 H. S. Hill	3		540		
Bremer	Waverly	32 O. H. Merchant	2		450		
Bremer	Sumner	32 H. L. Grant	13		1,000	German	
Bremer	Janesville	30 G. F. Harwood	1		400	Latin	
Bremer	Plainfield	21 J. J. McIntyre	2		250		
Buchanan	Independence	20 J. E. Davis	1		400		
		43 W. Elden	13		1,200	Latin and German	



## ABSTRACT [F]—CONTINUED.

COUNTY.	DISTRICT.	MONTHS' SESSION.	Number teachers employed and salary, not including Superintendent or Principal.				SUPERINTENDENT OR PRINCIPAL.	FOREIGN LANGUAGES TAUGHT.	
			Males.		Females.				
			Number.	Average salary per month.	Number.	Average salary per month.			
Clinton	Wheatland	9	1	\$ 50	3	\$ 33	N. E. Doolittle	\$ 450	
Clinton	Camanche	9	2	40	2	30	A. P. Barker	450	
Clinton	Clinton	10	1		1	70	H. Satin	1,800	Latin
Crawford	Denison	9			5	40	G. N. Vanwormer	900	
Crawford	Dowville	9			1	40	J. T. Archard	406	
Crawford	Deloit	7			1	28	E. T. Dobson	210	
Crawford	West Side	9			1	40	G. Wooster	450	
Crawford	Vail	9			2	40	E. M. Ainsworth	720	
Dallas	Adel	9			5	40	M. E. Phillips	1,000	
Dallas	Dexter	9			3	45	I. Doling	720	
Dallas	De Soto	9			3	45	C. M. Pinkerton	720	
Dallas	Perry	9			3	40	D. G. Perkins	630	
Dallas	Dallas Center	9			2	35	T. K. Whitlock	540	
Dallas	Waukee	9			1	30	A. O. Phillips	360	
Dallas	Van Meter	9			1	30	J. F. Curran	450	
Dallas	Redfield	9			1	30	I. Turtchel	360	
Dallas	Minburn	6			1	30	S. H. Lander	240	
Davis	Bloomfield	8	2	42	4	35	J. R. Faulks	480	
Davis	Drakeville	9	1	35	1	25	J. M. Bronhard	315	
Decatur	Garden Grove	9	1	33	2	28	R. A. Harkness	1,200	Latin and Greek
Decatur	Leon	10	2	40	4	30	C. M. Des Isles	800	
Delaware	Manchester	9			8	36	C. D. Clark	900	Latin
Delaware	Earlville	9			2	35	H. E. Stetson	600	
Delaware	Delhi	10			3	30	J. H. Sullivan	600	
Delaware	Hopkinton	9			3	28	F. H. Paul	360	
Des Moines	Burlington	10	12	95	56	42	R. Sanderson	1,650	Latin and German
Des Moines	Danville	9	2	60	2	40	J. B. Hungerford	420	
Des Moines	Mediapolis	7½			2	31	M. J. Gelly	800	
Dubuque	Dubuque High School	10	2	90	2	55	H. L. Peet	1,500	Latin and German





## ABSTRACT [F]—CONTINUED.

COUNTY.	DISTRICT.	Number teachers employed and salary, not including Superintendent or Principal.				SUPERINTENDENT OR PRINCIPAL.		FOREIGN LANGUAGES TAUGHT.
		Males.		Females.		NAME.	Salary per Annum.	
		Number.	Average salary month.	Number.	Average salary month.			
Hardin	Iowa Falls	9	1	4	\$ 35	A. A. Weaver	\$ 900	Latin
Hardin	Steamboat Rock	9	1	2	33	D. A. Hamm	1,200	
Hardin	Union	8	1	3	32	H. G. Fuller	495	
Harrison	Dunlap	10	2	50	40	T. J. Moffat	800	Latin
Harrison	Woodbine	10	1	1	40	E. G. Tyler	800	
Harrison	Logan	10	1	1	45	S. G. Rogers	800	
Harrison	Mission Valley	10	2	50	40	C. Coleman	800	
Harrison	Little Sioux	10	1	1	40	G. S. Massey	700	
Howard	Cresco	9	1	7	40	L. T. Wald	1,200	Latin and German
Howard	Lime Springs	9	2	37	37			
Howard	Riceville	9	2	37	1			
Ida	Ida	9	1	55	1		485	
Ida	Ida Grove	9	1	40	1		800	
Iowa	Marengo	10	1	9	9		1,200	Latin and German
Iowa	Victor	10	1	4	4		750	
Iowa	Millersburg	9	1	2	2		400	Latin
Jackson	Andrew	9	1	2	2		315	
Jackson	Baldwin	9	1	1	1		850	
Jackson	Bellevue	9	1	6	6		800	Latin and German
Jackson	Maquoketa	9	1	40	9		900	Latin and German
Jackson	Miles	9	1	1	1		540	
Jackson	Monmouth	8	1	1	1		850	
Jackson	Sabula	10	1	3	3		850	
Jackson	Preston	9	1	2	2		485	
Jasper	Newton	9	1	12	12		1,000	Latin
Jasper	Monroe	8	1	6	6		600	Latin
Jasper	Kellogg	9 1/2	2	35	3		685	Latin
Jasper	Prairie City	9	1	3	3		540	
Jasper	Colfax	9	1	2	2		405	
Jasper	Lynnville	9	1	25	1		400	

Jasper	Greenacres	30	1	1	1	300	J. A. Logan	1,000	Latin
Jasper	Galesburg	25	2	2	2	710	W. H. Ap'ln	1,500	German
Jefferson	Babate	25	1	1	1	210	A. J. Sheridan	450	German
Jefferson	Brookville	25	1	1	1	210	W. D. Garmor	850	Latin
Jefferson	Fairfield	25	1	1	1	1,000	W. Sparr	850	Latin
J. Gera in	Libertyville	25	1	1	1	1,000	J. H. Caras	755	Latin
Johnson	Iowa City	25	1	1	1	1,500	A. A. Guthrie	800	Latin and German
Johnson	Solon	25	1	1	1	1,500	W. M. Martin	850	Latin
Jones	Amos	25	1	1	1	850	P. H. I.	850	Latin
Jones	Monticello	25	1	1	1	850	L. Foster	850	Latin
Jones	Wyoming	25	1	1	1	850	C. S. Shepard	850	Latin
Jones	Olga	25	1	1	1	850	C. F. McGrew	850	Latin
Jones	Strawberry Hill	25	1	1	1	850	E. J. Peet	850	Latin
Keokuk	Algona	25	1	1	1	850	J. H. Applegate	850	Latin
Keokuk	Keokuk	25	1	1	1	850	W. B. McKeever	850	Latin
Keokuk	Delta	25	1	1	1	850	J. H. Andrews	850	Latin
Keokuk	Richland	25	1	1	1	850	E. A. Walker	850	Latin
Keokuk	South English	25	1	1	1	850	V. Kleier	850	Latin
Keokuk	What Cheer	25	1	1	1	850	Mary Ward	850	Latin
Keokuk	Springfield	25	1	1	1	850	F. P. Burgess	850	Latin
Keokuk	Harper	25	1	1	1	850	C. L. Evans	850	Latin
Keokuk	Talleyrand	25	1	1	1	850	V. B. Nash	850	Latin
Keokuk	Iola	25	1	1	1	850	R. Weller	850	Latin
Keokuk	Coal Creek	25	1	1	1	850	S. A. D. Hamilton	850	Latin
Keokuk	Algona	25	1	1	1	850	G. P. Darland	850	Latin
Keokuk	Cedar Rapids	25	1	1	1	850	J. W. Akers	850	Latin
Keokuk	Ladon	25	1	1	1	850	A. M. Mecklen	850	Latin
Keokuk	Marion	25	1	1	1	850	J. W. McGowan	850	Latin
Keokuk	Mt. Vernon	25	1	1	1	850	J. C. Johnson	850	Latin
Keokuk	Columbus City	25	1	1	1	850	Maria Yates	850	Latin
Keokuk	Columbus Junction	25	1	1	1	850	R. B. Huff	850	Latin
Keokuk	Merroling San	25	1	1	1	850	A. N. Fellows	850	Latin
Keokuk	Wapello	25	1	1	1	850	O. I. Jamison	850	Latin
Keokuk	Chariton	25	1	1	1	850	J. A. Russell	850	Latin
Keokuk	Lucas	25	1	1	1	850	J. M. Harkin	850	Latin
Keokuk	Russell	25	1	1	1	850	A. H. Davidson	850	Latin
Keokuk	Rock Rapids	25	1	1	1	850	E. N. Tupper	850	Latin
Keokuk	Beloit	25	1	1	1	850	Mrs. K. N. Mowatt	850	Latin
Keokuk	Winterset	25	1	1	1	850	Hartley	850	Latin
Keokuk	Earlham	25	1	1	1	850	Secley	850	Latin
Keokuk	Oskaloosa	25	1	1	1	850	M. M. Munger	850	Latin
Keokuk	New Sharon	25	1	1	1	850	A. E. Thomas	850	Latin
Keokuk	Bascon	25	1	1	1	850	Johnson	850	Latin
Keokuk	Knorrville	25	1	1	1	850	Corr	850	Latin
Keokuk	Pella	25	1	1	1	850	Andrews	850	Latin
Keokuk	Okey	25	1	1	1	850	Sharp	850	Latin
Keokuk	Marysville	25	1	1	1	850	West	850	Latin
Keokuk	Pleasantville	25	1	1	1	850	Rogers	850	Latin
Keokuk	Marshalltown	25	1	1	1	850	Curtis	850	Latin
Keokuk	State Center	25	1	1	1	850			

## ABSTRACT [F]—CONTINUED.

COUNTY.	DISTRICT.	MONTHS' SESSION.				Numb r teachers employed and salary.				SUPERINTENDENT OR PRINCIPAL.		FOREIGN LANGUAGES TAUGHT.
		Males.		Females.		NAME.		Salary per annum.				
		Number.	Average sal. per month.	Number.	Average sal. per month.							
Marshall	Gilman	9	2	35	35	R. D. Jones	660					
Marshall	Albion	8	2	38	38	W. E. Crosby	750					
Mills	Glenwood	9	50	48	48	W. J. Long	900	Latin				
Mills	Malvern	9	1	40	40	E. B. Parrish	680	Latin				
Mills	Hastings	9	1	35	35	W. M. Moore	466	Latin				
Mills	Emerson	9	2	30	30	J. A. McLean	475					
Mills	Tabor	9	2	36	36	G. Lindsay	405					
Mitchell	Mitchell	9	2	35	35	J. F. Clyde	750					
Mitchell	Osgoe	10	1	37	37	A. O. Roe	1,007					
Monona	Onawa	9	6	61	61	F. T. Lyon	1,000	Latin				
Monroe	Albia	9	6	46	46	J. Valentine	960					
Montgomery	Red Oak	9	8	40	40	W. O. Davis	1,000	Latin				
Montgomery	Village	9	4	40	40	C. W. Gurney	750	Latin				
Montgomery	Millford	9	1	26	26	J. O. Applebee	820					
Muscatine	Muscatine	10 1/2	4	38	38	F. M. Witter	1,176	Latin and German				
Muscatine	Wilton	10	1	35	35	G. S. Bradley	900	Latin and German				
Muscatine	West Liberty	9	1	40	40	J. N. Sloan	640					
Muscatine	Atalissa	9	1	35	35	D. W. Walker	450					
Page	Amity	9	1	30	30	W. R. Collicotte	640					
Page	Clearida	9	10	38	38	J. A. Woods	1,000					
Page	Emax	9	8	30	30	G. W. Thomas	631					
Page	Hawleyville	9	1	30	30	J. W. Y. Nuhn	831					
Page	Shenandoah	10	5	41	41	O. J. Colton	1,000	German				
Palo Alto	Emmettburg	9	2	30	30	A. Hutchy	495					
Plymouth	Le Mars	10	1	36	36	J. A. Weaver	900	German				
Polk	Des Moines—West Side	9 1/2	5	106	106	L. W. Parish	1,803	Latin				
Polk	Des Moines—East Side	9	5	92	92	T. H. Smith	1,350	Latin				
Polk	Mitchellville	9	2	51	51	E. Hamilton	600	Latin				
Polk	Polk City	9	2	49	49	W. F. Chervier	810					
Polk	Altoona	9	2	36	36	Alice Thompson	810					

Pottawattamie	Avoca	10	1	100	3	40 W. M. Colby	1,000	Latin	.....
Pottawattamie	Walnut	9	1	75	28	45 Miss E. Flickenger	400	German	.....
Pottawattamie	Council Bluffs	10	8	40	6	50 A. E. Clarendon	1,000	Latin	.....
Pottawattamie	Brooklyn	9	1	40	6	40 J. P. McAmis	750	Latin	.....
Pottawattamie	Fort Du Sable	10	4	45	10	45 A. T. Free	900	Latin	.....
Pottawattamie	Montezuma	9	1	20	8	40 W. Gibbs	600	Latin	.....
Pottawattamie	Malcom	9	1	40	2	40 E. B. Free	540	Latin	.....
Pottawattamie	Mt. Airy	8	1	40	2	40 Mrs. L. M. Ellington	520	Latin	.....
Pottawattamie	Sec City	9	1	60	2		540	Latin	.....
Pottawattamie	Davenport	10	17	94	91		1,800	Latin and German	.....
Pottawattamie	Le Claire	9	1	45	2		630	Latin	.....
Pottawattamie	Princeton	8	1	1	1		300	German	.....
Pottawattamie	Buffalo	10	1	1	1		550	German	.....
Pottawattamie	Walcott	10	1	1	1		600	German	.....
Pottawattamie	Harlan	9	1	1	1		900	Latin	.....
Pottawattamie	Shelby	9	1	1	1		600	Latin	.....
Pottawattamie	Shelby	9	1	1	1		900	Latin	.....
Pottawattamie	Nevada	9	1	1	1		585	Latin	.....
Pottawattamie	Ames	9	1	1	1		585	Latin	.....
Pottawattamie	Guthrie	7	1	32	1		585	Latin	.....
Pottawattamie	Iowa Center	8	1	32	1		900	Latin	.....
Pottawattamie	Cambridge	8	1	38	1		1,000	Latin	.....
Pottawattamie	Buckingham	7	1	40	1		900	Latin	.....
Pottawattamie	Dynant	7	1	45	1		810	Latin	.....
Pottawattamie	Montour	9	1	1	1		360	Latin	.....
Pottawattamie	Tama	9	1	1	1		360	Latin	.....
Pottawattamie	Toledo	9	1	1	1		1,000	Latin and Greek	.....
Pottawattamie	Traer	10	1	1	1		1,200	Latin and German	.....
Pottawattamie	Bedford	9	1	1	1		600	Latin	.....
Pottawattamie	Lenox	9	1	1	1		630	Latin	.....
Pottawattamie	Codway	9	1	1	1		315	Latin	.....
Pottawattamie	Afton	9	1	1	1		455	Latin	.....
Pottawattamie	Creston	10	4	45	12		420	Latin	.....
Pottawattamie	Keosauqua	8	1	50	3		315	Latin	.....
Pottawattamie	Bonaparte	9	1	50	3		455	Latin	.....
Pottawattamie	Birmingham	7	1	50	3		420	Latin	.....
Pottawattamie	Bentonsport	7	1	50	3		315	Latin	.....
Pottawattamie	Farmington	7	1	50	3		280	Latin	.....
Pottawattamie	Milton	6	1	50	3		1,000	Latin, Greek and German	.....
Pottawattamie	Winchester	9	1	50	3		1,000	Latin and German	.....
Pottawattamie	Vernon	8	1	50	3		600	Latin	.....
Pottawattamie	Ottumwa	9	1	50	3		400	Latin	.....
Pottawattamie	Agency City	10	1	50	3		384	Latin	.....
Pottawattamie	Eddyville	8	1	50	3		300	Latin	.....
Pottawattamie	Kirkville	8	1	50	3		350	Latin	.....
Pottawattamie	Center	8	1	50	3		400	Latin	.....
Pottawattamie	Star	7	1	50	3		370	Latin	.....
Pottawattamie	Eldon	8	1	50	3		1,000	Latin	.....
Pottawattamie	Chillicothe	8	1	50	3		1,000	Latin	.....
Pottawattamie	Wapello	8	1	50	3		1,000	Latin	.....
Pottawattamie	Wapello	8	1	50	3		1,000	Latin	.....
Pottawattamie	Warren	8	1	50	3		1,000	Latin	.....

## ABSTRACT [G]—CONTINUED.

COUNTY.	LOCATION.	TITLE.	PRESIDENT OR PRINCIPAL.	Number of teachers.	Number of students.
Mahaska .....	Oskaloosa.....	.....	G. F. Carpenter.....	5	140
Mahaska .....	Oskaloosa.....	.....	W. B. Morgan.....	5	150
Marion .....	Pella.....	.....	L. A. Dunn, D. D.....	7	229
Mills .....	Malvern .....	.....	.....	.....	.....
Page .....	College Springs.....	.....	S. C. Marshall.....	4	99
Polk .....	Des Moines .....	es Moines .....	J. A. Nash, D. D.....	.....	.....
Polk .....	Des Moines .....	Law .....	T. S. Berry, M. A.....	.....	.....
Poweshiek .....	Grinnell .....	.....	G. F. Magoun, D. D.....	15	805
Scott.....	Davenport .....	.....	W. S. Perry, D. D.....	6	40
Warren .....	Indianola .....	ary College .....	T. S. Berry, M. A.....	7	159
Winneshie.....	Decorah .....	Luther College .....	L. Larson.....	11	190

## ABSTRACT [H]

## REPORTS FOR 1879.

## ACADEMIES AND OTHER PRIVATE SCHOOLS.

COUNTY.	LOCATION.	TITLE.	PRINCIPAL.	Number of Teachers.	Number of Pupils.
Allamakee	Waukon		J. Loughran	3	80
Benton	Vinton		T. Tobin	4	100
Benton	Blairstown		J. McCarty	2	95
Benton	Irving	Irving Institute.	W. Craven	1	25
Black Hawk	Waterloo	Prairie Home Seminary	Anna Field	2	50
Black Hawk	Waterloo	Our Lady of Victory		5	80
Boone	Boone	Kindergarten	Miss L. Tallman		
Buchanan	Independence	Notre Dame	P. Burke	2	98
Buchanan	Quasqueton	St. Mary's Parish	P. J. Clabby	1	20
Clayton	Garnaville	Garnaville High School	J. Briggs	1	40
Clayton	Elkader	Sisters of Charity	Sisters of Charity	2	50
Clayton	Guttenberg	Sisters of Charity	Sisters of Charity	2	70
Clayton	McGregor	Sisters of Charity	Sisters of Charity	2	80
Clayton	Clayton Center	German School	Lutheran Priest	1	50
Clinton	Lyons	Seminar	Sister Mary Anastasia	5	190
Clinton	Lyons	St. Francis	Sister Mary Anastasia	3	130
Clinton	Clinton	Angels	N. H. Pearce		
Davis	Bloomfield	School and Com. Inst	O. A. Shotts	5	100
Davis	Troy	Troy Academy	A. H. Fields	1	40
Delaware	Hopkinton	Lenox Collegiate Institute	S. Hedges, D. D.	6	150
Delaware	Petersburg	Catholic School		1	40
Delaware	Manchester	Manchester Academy	A. S. Kissell	3	70
Des Moines	Kossuth	Kossuth Normal Academy	G. T. Eldridge	4	110
Des Moines	Burlington	Gaff's School	R. S. Gaff	1	35





Dubuque	Sherrill's Mount	Lutheran School	Mr. Lessman	1	15
Fayette	West Union	Select School	S. S. Ainsworth	1	50
Fayette	Oelwein	Select School	Mrs. A. McMillan	2	80
Greene	Jefferson	Jefferson Academy	Rev. J. S. Dunning	5	...
Grundy	Keinbeck	Private	Emma Powers	1	40
Guthrie	Panora	Guthrie County High School	R. D. Jones	2	50
Hardin	Eldora	Eldora Academy	Susan B. Collins	2	43
Hardin	Ackley	Catholic School	Dr. Schutz	8	...
Henry	Mt. Pleasant	German College	...	...	...
Henry	Mt. Pleasant	Female Seminary	S. C. Howe	2	90
Henry	Mt. Pleasant	Howe's Academy	Prof. C. Moreum	1	20
Henry	Mt. Pleasant	...	Prof. Rommell	2	60
Henry	Mt. Pleasant	...	Prof. Coltrain	3	45
Henry	Salem	...	Rev. Thos. Ure	1	20
Howard	Riceville	...	John McLeod	1	40
Humboldt	Humboldt	...	Mr. Friga	1	35
Iowa	Iowa township	German School	...	1	28
Iowa	Dayton township	German School	...	1	10
Iowa	Genoa Bluff	English School	...	1	...
Jasper	Newton	Hazel Dell	D. Thomas	1	...
Jasper	Lynnville	Lynnville Academy	Miss Johnson	2	...
Jefferson	Pleasant Plain	Pleasant Plain Academy	N. Rosenberger	2	81
Johnson	Iowa City	St. Joseph's Institute	Wm. Emmons	5	150
Johnson	Iowa City	Commercial College	F. R. Williams	3	150
Johnson	Iowa City	Iowa City Academy	A. Hiatt	5	130
Jones	Anamosa	Anamosa Academy	C. F. Springon	1	60
Keokuk	Baden	Baden School	Sisters of Charity	8	70
Keokuk	Coal Creek	Friends' School	J. Edgerton	1	40
Keokuk	Clear Creek township	German Catholic School	...	1	40
Kossuth	Fenton township	Lutheran German	...	1	20
Linn	Cedar Rapids	Coe Institute	Rev. Condit	3	75
Louisa	Grandview	Eastern Iowa Normal School	E. R. Eldridge	11	438
Lucas	Chariton	...	Mrs. R. A. Stewart	2	60
Lucas	Chariton	...	J. W. Perry	1	20
Marion	Knoxville	...	— Cart	1	18
Marion	Dallas township	School	Rev. M. Strobel	1	20
Marshall	Le Grand	...	Morris P. Wright	2	63
Marshall	Albion	Albion Seminary	W. F. Barclay	2	60

## ABSTRACT [H]—CONTINUED.

COUNTY.	LOCATION.	TITLE.	PRINCIPAL.	Number of teachers.	Number of pupils.
Muscatine	Wilton	.....	J. B. Harris.	3	35
Plymouth	Lemars	.....	.....	5	90
Polk	Mitchellville	.....	E. Chase	.....	.....
Polk	Des Moines	.....	B. W. Bowen	2	176
Polk	Des Moines	.....	A. C. Jennings	.....	.....
Polk	Des Moines	.....	Sisters	.....	.....
Polk	Des Moines	.....	Sisters	.....	.....
Polk	Des Moines	.....	Mrs. L. B. Collins	.....	.....
Pottawattamie	Council Bluffs	.....	Chamberlain & Blum	2	94
Pottawattamie	Council Bluffs	.....	Franciscan Sisters	6	140
Scott	Davenport	.....	D. R. Lillibridge	8	480
Scott	Davenport	.....	Sarah Rice	6	88
Scott	Davenport	.....	J. S. Kahrman	2	76
Scott	Davenport	.....	W. Schaeffer	1	60
Scott	Davenport	.....	Sisters	14	275
Scott	Davenport	.....	Sisters	7	880
Scott	Davenport	.....	Sisters	4	240
Scott	Davenport	.....	Sisters	3	180
Taylor	Bedford	.....	J. C. Kerr	2	50
Van Buren	Birmingham	.....	J. W. Wolf	3	30
Wapello	Ottumwa	.....	Mrs. M. A. Peck	2	91
Wapello	Ottumwa	.....	Father Kreckel	2	50
Wapello	Ottumwa	.....	Father Kreckel	2	100
Wapello	Ottumwa	.....	Hollingsworth & Strong	2	.....
Warren	Ackworth	.....	E. W. Beard	.....	.....
Washington	Washington	.....	Rev. W. P. Johnson	3	125
Washington	Washington	.....	J. D. Flannery	3	85
Wayne	Seymour	.....	J. H. Carr	3	60
Webster	Ft. Dodge	.....	Sisters	5	800

Winneshiek.....	Decorah .....	Decorah Institute .....	J. Breckenridge.....	5	185
Winneshiek.....	Festina .....	Sisters' School.....	Sisters St. Francis .....	3	112
Winneshiek.....	Decorah .....	Parochial School .....	Albert Egge .....	2	64
Winneshiek.....	Spillville.....	Catholic Parochial School .....	J. J. Kovarik .....	2	154
Winneshiek.....	Ossian .....	German Catholic .....	Mrs. C. Wiltgen.....	1	36

## ABSTRACT [I]

## REPORTS FOR 1879.

## TEXT-BOOKS USED IN THE PUBLIC SCHOOLS.

*Orthography*—American, Analytical, Childs, DeWolf, Eclectic, Edwards, Henderson, Halford, Henkle's Test Speller, McGuffey, National, Osborne, Osgood, Sanders, Sargent, Sherwood, Smith, Swinton, Town, Union, United States, Warren, Watson, Webb, Webster, Worcester, Wright.

*Reading*—American, Analytical, American Educational, Appleton's School Readers, Butler, Eclectic, Edwards, Harvey, Hillard, Independent, McGuffey, Monroe, National, New American, New Graded, Osgood, Parker, Sanders, Sargent, Sheldon, Town, Union, United States, Watson, Webb.

*Writing*—American, Babbittonian, Bryant and Stratton, Eastman, Eclectic, National, Payson, Dunton and Scribner, Pierce, Pratt, Southworth, Spencerian, Thompson.

*Arithmetic*—Brooks, Davies, Dean, Eaton, Emerson, Felter, Fish, French Goff, Greenleaf, Hager, Olney, Ray, Robinson, Sanford, Stoddard, Thompson, Walton, White.

*Geography*—Camp, Coles & Fitch, Colton, Cornell, Dewell, Eclectic, Excelsior, Guyot, Harper, McNally, Mills, Mitchell, Monteith, National, Normal, Olney, Steinwehr & Brinton, Swinton, Warren, White.

*English Grammar*—Brown, Bullion, Burt, Clark, Covel, Greene, Hadley, Harvey, Holbrook, Howe, Kerl, Mitchell, Pinneo, Quackenbos, Sill, Smith, Swinton, Wells, Welch.

*Physiology*—Anderson, Brown, Cutter, Dalton, Draper, Hitchcock, Hooker, Hutchinson, Huxley, Jarvis, Loomis, Martindale, Peck, Steele, Quackenbos, Wells, Youmans.

*History of United States*—Anderson, Barnes, Bennett, Berard, Butler, Campbell, Carver, Goodrich, Harper, Lossing, Monteith, Quackenbos, Ridpath, Scott, Seavey, Swinton, Venable, Willard, Wilson.

*Algebra*—Davies, Ficklin, Loomis, Olney, Ray, Robinson, Schuyler.

*Geometry*—Davies, Evans, Loomis, Olney, Ray, Robinson.

*Natural Philosophy*—Anderson, Cooley, Ganot, Gillet, Hooker, Jarvis, Norton, Parker, Peck, Quackenbos, Rolfe, Schuyler, Steele, Wells.

*Botany*—Gray, Wells, Wood, Youmans.

*Book-keeping*—Bryant & Stratton, Drew, Hanaford & Payson, Palmer.

*German*—Abn, Campbell, Comfort, Ollendorf, Schmidt, Schultze, Woodbury.

*Latin*—Andrews & Stoddard, Arnold, Bullion, Crooks, Harkness, McClintock, Bartholomew.

*Greek*—Bullion, Hadley.

*Rhetoric*—Hart, Haven, Hayden, Hepburn, Kerl, Quackenbos.

*Chemistry*—Cooley, Gillet, Rolfe, Steele, Youmans.

*Astronomy*—Kiddle, Lockyer, Ray, Steele.

*Mental Philosophy*—Haven, Upham.

*English Composition*—Hart, Parker, Quackenbos, Swinton.

*Drawing*—Bartholomew, Krusi, Smith.

*Physical Geography*—Cornell, Mitchell, Warren.

*Geology*—Dana.

*Natural History*—Tenney.

*English Literature*—Cleveland, Shaw, Taine.

## STATEMENT

*Of the Bonded Indebtedness of Independent Districts.*

COUNTY.	AMOUNT.	COUNTY.	AMOUNT.
Adair.....	\$ 5,000	Jefferson .....	\$ 400
Adams.....	2,546	Johnson .....	4,825
Allamakee .....	2,160	Jones .....	13,600
Appanoose .....	6,100	Keokuk.....	11,900
Audubon .....	4,500	Kossuth .....	.....
Benton .....	.....	Lee .....	1,900
Black Hawk .....	33,000	Linn.....	44,000
Boone .....	24,700	Louisa .....	12,500
Bremer .....	9,925	Lucas.....	16,500
Buchanan.....	8,850	Lyon .....	42,000
Buena Vista .....	5,410	Madison .....	14,060
Butler .....	7,234	Mahaska .....	32,000
Calhoun .....	.....	Marion .....	42,000
Carroll.....	6,500	Marshall .....	21,800
Cass .....	11,000	Mills.....	9,500
Cedar .....	20,450	Mitchell ...	12,550
Cerro Gordo.....	16,000	Monona.....	9,000
Cherokee .....	2,800	Monroe .....	3,150
Chickasaw .....	1,700	Montgomery .....	9,300
Clarke .....	7,500	Muscatine .....	35,000
Clay .....	450	O'Brien .....	4,000
Clayton .....	28,000	Osceola .....	4,422
Clinton .....	45,000	Page .....	29,600
Crawford .....	3,760	Palo Alto .....	1,125
Dallas .....	14,500	Plymouth.....	10,000
Davis .....	.....	Pocahontas .....	230
Decatur.....	10,400	Polk .....	114,390
Delaware .....	5,000	Pottawattamie .....	.....
Des Moines .....	2,778	Poweshiek .....	5,600
Dickinson .....	1,200	Ringgold.....	6,329
Dubuque .....	7,300	Sac .....	3,000
Emmet .....	4,000	Scott.....	320
Fayette .....	7,946	Shelby .....	4,500
Floyd.....	5,600	Sioux .....	.....
Franklin .....	14,000	Story .....	7,700
Fremont .....	23,300	Tama .....	31,350
Greene.....	17,600	Taylor .....	13,500
Grundy .....	.....	Union .....	38,900
Guthrie .....	16,500	Van Buren .....	6,480
Hamilton .....	.....	Wapello .....	10,300
Hancock.....	.....	Warren .....	21,393
Hardin .....	39,500	Washington .....	4,500
Harrison.....	3,500	Wayne....	10,000
Henry .....	.....	Webster .....	22,600
Howard ...	7,500	Winnebago .....	5,100
Humboldt .....	.....	Winneshiek.....	2,400
Ida.....	.....	Woodbury .....	11,200
Iowa.....	1,500	Worth.....	2,200
Jackson.....	25,600	Wright .....	1,325
Jasper .....	28,000	Total .....	\$1,197,158

## LIST OF COUNTY SUPERINTENDENTS

WHOSE TERMS EXPIRE JANUARY 5, 1880.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Adair*	M. W. Haver	Greenfield.
Adams	T. L. Maxwell	Corning.
Allamakee	J. Loughran	Waukon.
Appanoose	D. R. Guernsey	Centerville.
Audubon	A. K. Brainard	Exira.
Benton*	Miss S. Blackburn	Vinton.
Black Hawk*	J. S. George	Waterloo.
Boone	G. W. Lloyd	Moingona.
Bremer	D. C. Chamberlin	Waverly.
Buchanan*	W. E. Parker	Independence.
Buena Vista	A. J. White	Sulphur Springs.
Butler*	J. W. Stewart	Shell Rock.
Calhoun*	A. Calhoun	Lake City.
Carroll	H. W. Bean	Glidden.
Cass*	R. H. Frost	Atlantic.
Cedar*	Miss E. E. Frink	Tipton.
Cerro Gordo*	M. H. Kling	Mason City.
Cherokee	W. F. Rose	Cherokee.
Chickasaw*	W. D. Collins	New Hampton.
Clarke	J. Molesworth	Osceola.
Clay	S. Gillespie	Spencer.
Clayton	P. W. McClelland	Elkader.
Clinton	M. J. Wilcox	Lyons.
Crawford	Z. T. Hawk	Denison.
Dallas*	A. Dilley	Adel.
Davis*	I. F. Jenkins	Bloomfield.
Decatur*	Miss J. Kellogg	Leon.
Delaware*	R. M. Ewart	Manchester.
Des Moines	J. Paisley	Burlington.
Dickinson*	H. C. Crary	Milford.
Dubuque*	N. W. Boyes	Dubuque.
Emmet*	F. Davey	Estherville.
Fayette	G. W. Fitch	Hawk Eye.
Floyd	G. H. Nichols	Marble Rock.
Franklin	I. W. Myers	Hampton.
Fremont*	T. J. Brant	Sidney.
Greene	H. A. Turrill	Jefferson.
Grundy	G. T. Cowgill	Grundy Center.
Guthrie*	G. C. Miller	Guthrie Center.
Hamilton	H. H. Johnson	Williams.
Hancock	M. L. Fuller	Upper Grove.
Hardin*	L. S. McCoy	Eldora.
Harrison	J. D. Hornby	Magnolia.
Henry	A. M. Linn	Mt. Pleasant.
Howard	W. H. Brocksome	Cresco.
Humboldt	J. A. Marvin	Humboldt.
Ida*	T. S. Snell	Ida.
Iowa	D. Hughes	Marengo.
Jackson	W. H. Fort	Maquoketa.

\*Re-elected two years ago.

## LIST OF COUNTY SUPERINTENDENTS—CONTINUED.

WHOSE TERMS EXPIRE JANUARY 5, 1880.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Jasper .....	Mrs. M. A. Mayfield.....	Newton.
Jefferson .....	J. Grinstead.....	Fairfield.
Johnson* .....	J. M. Curry .....	Iowa City.
Jones* .....	O. E. Aldrich.....	Wyoming.
Keokuk.....	J. Bland .....	Sigourney.
Kossuth .....	A. A. Crose .....	Algona.
Lee* .....	W. J. Medes.....	Keokuk.
Linn*.....	E. Johnston.....	Mt. Vernon.
Louisa .....	D. Helmick .....	Columbus Junction.
Lucas.....	L. A. Culbertson .....	Chariton.
Lyon .....	H. F. Green .....	Rock Rapids.
Madison* .....	H. W. Hardy.....	Winterset.
Mahaska.....	J. C. Williams.....	Oskaloosa.
Marion* .....	A. Yetter .....	Knoxville.
Marshall .....	W. W. Speer .....	Marshalltown.
Mills .....	W. H. Wright.....	Pacific City.
Mitchell .....	T. Ure .....	Osage.
Monona*.....	C. N. Lyman.....	Onawa.
Monroe .....	A. J. Casaday .....	Albia.
Montgomery* .....	W. P. Pattison .....	Red Oak.
Muscatine* .....	R. W. Leverich.....	Muscatine.
O'Brien .....	H. Day.....	Primghar.
Osceola .....	Mrs. W. L. Parker.....	Sibley.
Page* .....	E. Miller.....	Clarinda.
Palo Alto .....	Le Roy Grout.....	Emmetsburg.
Plymouth.....	F. W. Guernsey .....	Le Mars.
Pocahontas .....	D. Miller.....	Pocahontas Center.
Polk .....	J. H. Koons.....	East Des Moines.
Pottawattamie*.....	F. C. Childs .....	Council Bluffs.
Poweshiek* .....	W. R. Akers .....	Malcom.
Ringgold*.....	W. J. Work .....	Mt. Ayr.
Sac .....	J. Darling.....	Sac City.
Scott*.....	C. H. Clemmer .....	Davenport.
Shelby .....	M. D. Bridgman.....	Harlan.
Sioux* .....	S. Kuyper.....	Orange City.
Story .....	L. B. Baughman .....	Nevada.
Tama* .....	H. A. Brown.....	Toledo.
Taylor* .....	J. B. Owens.....	Bedford.
Union .....	J. D. Thomas .....	Afton.
Van Buren*.....	J. W. Rowley .....	Utica.
Wapello .....	W. A. McIntire .....	Ottumwa.
Warren* .....	Miss E. S. Cooke .....	Indianola.
Washington.....	Miss N. J. Springer.....	Washington.
Wayne. ....	J. H. Ware.....	Corydon.
Webster* .....	J. A. Adams .....	Fort Dodge.
Winnebago* .....	W. A. Chapman.....	Lake Mills.
Winneshiek*.....	N. Kessey.....	Decorah.
Woodbury .....	S. Rogers .....	Sioux City.
Worth .....	G. H. Whitcomb .....	Kensett.
Wright* .....	J. Q. Hanna.....	Goldfield.

\*Re-elected two years ago.



## LIST OF COUNTY SUPERINTENDENTS

WHOSE TERMS COMMENCE JANUARY 5, 1880.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Adair.....	J. W. Boyer .....	Greenfield.
Adams .....	H. M. Towner.....	Corning.
Allamakee .....	A. Row.....	Postville.
Appanoose.....	C. J. Brower.....	Centerville.
Audubon .....	R. M. Carpenter .....	Audubon.
Benton* .....	Miss S. Blackburn.....	Vinton.
Black Hawk.....	W. M. Smith .....	Waterloo.
Boone.....	J. H. Chambers.....	Boonsboro.
Bremer* .....	D. C. Chamberlin.....	Waverly.
Buchanan* .....	W. E. Parker.....	Independence.
Buena Vista* .....	A. J. White .....	Sulphur Springs.
Butler* .....	J. W. Stewart .....	Shell Rock.
Calhoun* .....	A. Calhoun .....	Lake City.
Carroll.....	G. W. Wattles.....	Carroll.
Cass* .....	R. H. Frost .....	Atlantic.
Cedar* .....	Miss E. E. Frink.....	Tipton.
Cerro Gordo .....	L. L. Klinefelter .....	Mason City.
Cherokee .....	H. B. Strever.....	Cherokee.
Chickasaw .....	H. A. Simons .....	New Hampton.
Clarke .....	S. F. Higley.....	Osceola.
Clay* .....	S. Gillespie .....	Spencer.
Clayton* .....	P. W. McClelland .....	Elkader.
Clinton* .....	M. J. Wilcox.....	Lyons.
Crawford .....	N. F. Smith.....	Denison.
Dallas* .....	A. Dilley.....	Adel.
Davis .....	R. W. Anderson.....	Pulaski.
Decatur.....	Miss L. V. Dye.....	Leon.
Delaware* .....	R. M. Ewart .....	Manchester.
Des Moines* .....	J. Paisley .....	Burlington.
Dickinson* .....	H. C. Crary .....	Milford.
Dubuque* .....	N. W. Boyes .....	Dubuque.
Emmet .....	J. W. Plummer .....	Estherville.
Fayette* .....	G. W. Fitch.....	West Union.
Floyd* .....	G. H. Nichols .....	Marble Rock.
Franklin .....	J. E. Evans .....	Hampton.
Fremont .....	Miss A. Williams .....	Hamburg.
Greene* .....	H. A. Turritt.....	Jefferson.
Grundy* .....	G. T. Cowgill.....	Grundy Center.
Guthrie* .....	G. C. Miller .....	Guthrie Center.
Hamilton* .....	H. H. Johnson .....	Williams.
Hancock .....	A. C. Ripley.....	Garner.
Hardin* .....	L. S. McCoy.....	Eldora.
Harrison* .....	J. D. Hornby.....	Magnolia.
Henry* .....	A. M. Linn.....	Mt. Pleasant.
Howard .....	F. C. Clark.....	Cresco.
Humboldt* .....	J. A. Marvin.....	Humboldt.
Ida* .....	T. S. Snell.....	Ida Grove.
Iowa* .....	D. Hughes .....	Marengo.
Jackson .....	C. A. Miller .....	Maquoketa.
Jasper .....	R. A. Mathews .....	Newton.
Jefferson* .....	J. Grinstead .....	Fairfield.

\* Re-elected.

## LIST OF COUNTY SUPERINTENDENTS—CONTINUED.

WHOSE TERMS COMMENCE JANUARY 5, 1880.

COUNTY.	SUPERINTENDENT.	POST-OFFICE.
Johnson	W. Blaine	Iowa City.
Jones*	O. E. Aldrich	Wyoming.
Keokuk	J. S. Bland	Sigourney.
Kossuth*	A. A. Crose	Algona.
Lee	J. S. Stewart	Donnellson.
Linn*	E. Johnston	Mt. Vernon.
Louisa	M. D. Nicol	Morning Sun.
Lucas*	L. A. Culbertson	Chariton.
Lyon*	H. F. Green	Rock Rapids.
Madison	Miss E. M. Ray	Winterset.
Mahaska	P. L. Kindig	Oskaloosa.
Marion	Z. T. Honnold	Knoxville.
Marshall*	W. W. Speer	Marshalltown.
Mills	Miss M. Archibald	Glenwood.
Mitchell	E. M. Rands	Osage.
Monona	J. G. Iddings	Mapleton.
Monroe	W. E. Elder	Albia.
Montgomery	J. A. McLean	Red Oak.
Muscatine*	R. W. Leverich	Muscatine.
O'Brien*	H. Day	Primghar.
Osceola	W. R. Lawrence	Sibley.
Page	S. E. Wilson	Clarinda.
Palo Alto	H. Perkins	Emmetsburg.
Plymouth*	F. W. Guernsey	Le Mars.
Pocahontas	O. I. Strong	Pocahontas Center.
Polk*	J. H. Koons	East Des Moines.
Pottawattamie	J. K. Cooper	Council Bluffs.
Poweshiek	A. L. Shattuck	Malcom.
Ringgold	W. E. Andrews	Mt. Ayr.
Sac*	J. Darling	Sac City.
Scott	P. S. Morton	Davenport, box 323.
Shelby*	M. D. Bridgman	Harlan.
Sioux*	S. Kuyper	Orange City.
Story*	L. B. Baughman	Nevada.
Tama	A. H. Sterrett	Toledo.
Taylor	W. P. Jeffrey	Bedford.
Union*	J. D. Thomas	Afton.
Van Buren	W. Hastings	Winchester.
Wapello	T. J. Sloan	Ottumwa.
Warren	A. A. McCoy	Indianola.
Washington*	Miss N. J. Springer	Washington.
Wayne*	J. H. Ware	Corydon.
Webster	J. G. Tapper	Dayton.
Winnebago	A. N. Brones	Forest City.
Winneshiek*	N. Kessey	Decorah.
Woodbury	N. E. Palmer	Oto.
Worth	B. J. Booth	Fertile.
Wright	C. F. Peterson	Clarion.

\* Re-elected.









REPORT  
OF THE  
STATE UNIVERSITY  
OF IOWA.

---

OCTOBER 1, 1879.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.





BOARD OF REGENTS.

*His Excellency, JOHN H. GEAR, Governor of the State,*  
MEMBER AND PRESIDENT OF THE BOARD EX-OFFICIO.

J. W. HENDERSON, Cedar Rapids, A. K. CAMPBELL, Newton, L. W. ROSS, Council Bluffs.	}	-	-	-	<i>Term expires 1880.</i>
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C. W. SLAGLE, Fairfield, T. S. PARR, Indianola, D. N. RICHARDSON, Davenport.	}	-	-	-	<i>Term expires 1882.</i>
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H. C. BULIS, Decorah, A. T. REEVE, Hampton, J. F. DUNCOMBE, Fort Dodge.	}	-	-	-	<i>Term expires 1884.</i>
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CARL W. VON COELLN, Supt. Public Instruction, J. L. PICKARD, President of the University.	}	-	<i>Members ex-officio.</i>		
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JOHN N. COLDREN,	-	-	-	-	-	-	-	<i>Treasurer.</i>
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WM. J. HADDOCK,	-	-	-	-	-	-	-	<i>Secretary.</i>
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J. L. PICKARD, W. G. HAMMOND, LEVI ROBINSON, C. W. SLAGLE.	}	-	-	-	-	<i>Executive Committee.</i>		
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IOWA CITY, IOWA, OCTOBER 1, 1879.

HON. C. W. VON COELLN, *Superintendent of Public Instruction of the State of Iowa*:

SIR—Attached we herewith transmit to you the Biennial Report of the Board of Regents of the State University of Iowa, including the Report of the President to the Governor, *ex-officio* President of the Board of Regents, as required by law.

This Report covers the period commencing October 1, 1877, and ending October 1, 1879.

By order of the Board of Regents.

Respectfully,

WM. J. HADDOCK, *Secretary*.



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# REPORT OF THE BOARD OF REGENTS.

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At a meeting of the Board of Regents of the State University of Iowa, held Nov. 5, 1879, Messrs. C. W. Slagle, L. W. Ross and H. C. Bulis were appointed a committee to prepare the Biennial Report of the Board for the two years commencing October 1, 1877, and ending September 30, 1879.

J. F. DUNCOMBE, *President pro tem.*

ATTEST:

W. J. HADDOCK, *Secretary.*

TO THE HON. C. W. VON COELLN, *Superintendent of Public Instruction*:

SIR—The Regents of the State University of Iowa submit their Biennial Report for the two years, ending September 30, 1879:

SUMMARY OF STATISTICS.

I. INCOME.

	1877-8	1878-9	1879-80
State appropriation.....	\$35,592.76	\$25,000.00	\$20,000.00
Tuition law department.....	5,030.00	5,541.66	6,500.00*
Tuition medical departments.....	2,565.00	2,587.00	4,920.00*
Tuition collegiate department.....	2,930.00	4,029.95	3,500.00*
Graduation fees.....	594.50	455.00	†
Interest on loans.....	23,095.92	17,673.91	
Incidental items .....	30.66		
Total.....	\$69,838.84	\$55,287.52	

II. EXPENDITURES.

	1877-8	1878-9	1879-80
Secretary's warrants .....	\$53,075.91	\$63,362.89	
Incidental bills for treasurer's office...	67.90	2.50	
Balance overdrawn at last report.....	5,002.38		
Total.....	\$58,146.19	\$63,365.39	\$53,232.00

The total for 1879-80 is the gross sum appropriated by the Board of Regents at its June session, part of which is already expended, and is so far included in the detailed report of the Secretary, herewith submitted.

The detailed report of the Treasurer, embodied in this report, shows the total assets of the University, as follows:

Working capital.....	\$218,847.26
Lands unsold, estimated value.....	15,600.00
Total assets, Nov. 1, 1879 .....	\$234,447.26

\* These items are necessarily estimated and will fall below the real receipts, since they are based upon the number of students enrolled at the opening of the term, while the experience of the past warrants the expectation of a considerable increase.

† Cannot be determined until the close of the year, but will not fall short of \$1,000.00.



The Secretary's report is brought down to September 27, 1879, and of course includes items not found in the Treasurer's report, which, in its relation to the Secretary's warrants, is brought down only to June 15, 1879. The difference between the two reports, \$3,865.13; increased by Secretary's warrants drawn since June 15, 1879, which amount to \$5,172.42, make the total difference \$9,037.55.

By reference to the last biennial report in which the same difference as to time exists, there will be found warrants between June 15 and October, 1, 1877, representing \$11,129.60. This will show a balance of unpaid warrants amounting to \$2,092.05, indicating a fair degree of confidence on the part of those in whose favor the warrants have been issued. The Treasurer's report gives ground for the confidence in that there is a balance on hand of \$3,614.78.

If the dates of the two reports be made to agree, Secretary's warrants from June 15, 1877, to June 15, 1879, will be found to call for...	\$118,530.85
Treasurer reports expended.....	116,438.80
Excess of warrants issued.....	<u>\$2,092.05</u>

The following report of the Auditing Committee, presented to the Board at its meeting in March, 1879, shows an exact agreement of accounts to that date.

Hon. A. K. Campbell, a member of the Finance Committee, was designated as Auditor at the June meeting of 1878. At the March meeting of 1879 the following report was presented:

"I deemed it necessary, in order to make my work satisfactory, to examine the vouchers of the Secretary, that we might know upon what authority the warrants cashed by the Treasurer were issued.

"We proceeded to the examination and found every warrant authorized by the Executive Committee, with the exception of ten or fifteen. Further examination showed that these warrants were issued either by direct authority of the Board, or if irregularly issued were yet by authority, and the Secretary came out of the examination with a perfectly clear record.

A. K. CAMPBELL, *Auditor.*"

The Treasurer pays only upon the Secretary's warrants, and hereafter an annual comparison of warrants with vouchers will be made.

The following schedule exhibits the names and salaries of the several professors, instructors and other officers of the University, as organized for the year 1879-80:

## COLLEGIATE DEPARTMENT.

Josiah L. Pickard, LL.D., President.....	\$ 2,800.00
Nathan R. Leonard, A. M., Professor of Mathematics and Astronomy, and Dean of the Faculty.....	1,700.00
Gustavus Hinrichs, A. M., M. D., Professor of Physical Science.....	1,700.00
Charles A. Eggert, A. M., Ph. D., Professor of Modern Languages and Literature.....	1,700.00
Amos N. Currier, A. M., Professor of Latin Language and Literature.....	1,700.00
Stephen N. Fellows, D. D., Professor of Mental and Moral Science and Didactics.....	1,700.00
Leonard F. Parker, A. M., Professor of Greek Language and Literature and History.....	1,700.00
Philetus H. Philbrick, M. S., C. E., Professor of Civil En- gineering.....	1,700.00
Samuel Calvin, A. M., Professor of Natural Science and Curator of Museum.....	1,700.00
Phebe W. Sudlow, A. M., Professor of English Language and Literature.....	1,700.00
James Chester (First Lieutenant, Brevet Captain, U. S. A.), Professor of Military Science and Tactics.....	
William C. Preston, Assistant Professor in Physical Science.....	1,200.00
Thomas H. McBride, Assistant Professor in Natural Science.....	1,200.00
Phebe Scofield, Instructor in Mathematics.....	900.00
Mary E. Apthorp, A. M., Instructor for half time in Ger- man and Greek.....	450.00
James F. Polley, Instructor in Drawing.....	600.00
Total salaries in Collegiate Department.....	\$ 22,450.00

## LAW DEPARTMENT.

William G. Hammond, LL.D., Chancellor .....	\$ 2,500.00
Orlando C. Howe, Resident Professor of Law.....	1,700.00
James M. Love, LL.D. (U. S. District Judge for Iowa), Pro- fessor of Commercial Law and the Law of Persons and Personal Rights.....	1,000.00
———. ———. Professor of the Jurisdiction and Practice of Federal Courts.....	

Austin Adams, A. M. (Judge of the Supreme Court of Iowa), Lecturer on the Law of Corporations and Insurance.....	300.00
For Specific Lectureships and for the chair vacant by resignation of Judge Dillon, an appropriation is made of....	1,100.00
Total salaries Law Department.....	\$ 6,600.00

## MEDICAL DEPARTMENT.

William F. Peck, A. M., M. D., Dean and Professor of Surgery and Clinical Surgery.....	\$ 950.00
P. J. Farnsworth, A. M., M. D., Professor of Materia Medica and Diseases of Children.....	950.00
W. S. Robertson, A. M., M. D., Professor of Theory and Practice of Medicine and Clinical Medicine.....	950.00
J. C. Shrader, M. D., Professor of Obstetrics and Diseases of Women.....	950.00
W. D. Middleton, M. D., Professor of Physiology and Microscopic Anatomy.....	950.00
Elmer F. Clapp, M. D., Professor of Anatomy.....	950.00
Gustavus Hinrichs, A. M., M. D., Professor of Chemistry..	450.00
E. C. Cook, Lecturer on Medical Jurisprudence.....	100.00
Mark Ranney, M. D. (Superintendent of the Hospital for Insane at Mount Pleasant), Lecturer on Insanity.....	150.00
C. M. Hobby, M. D., Lecturer on Ophthalmology and Otology; Demonstrator of Anatomy and Curator of Medical Museum.....	575.00
O. T. Gillette, M. D., Assistant to Professor in Surgery and Secretary of Faculty.....	
I. P. Wilson, D. D. S., Lecturer on Dental Surgery.....	50.00
Total salaries Medical Department.....	\$ 7,025.00

## HOMŒOPATHIC MEDICAL DEPARTMENT.

A. C. Cowperthwaite, Ph. D., M. D., Dean and Professor of Materia Medica and Diseases of Women and Children...\$	1,400.00
W. H. Dickinson, A. M., M. D., Professor of Theory and Practice of Medicine.....	950.00
A. E. Rockey, M. D., Professor of Surgery.....	300.00
For Specific Lectureships.....	50.00
Total salaries Homœopathic Medical Department...\$	2,700.00

## OFFICERS AND EMPLOYEES.

Mrs. Ada North, Librarian.....	\$ 900.00
John N. Coldren, Treasurer.....	800.00
William J. Haddock, Secretary.....	1,000.00
George Tomlin, Janitor.....	420.00
William Green, Medical Janitor.....	240.00
Assistant Janitress.....	222.00
Assistant Fireman, \$6 per week for time of firing, estimated.	150.00

Total salaries, officers and employees.....\$ 3,732.00

Total salaries fixed for year 1879-80.....\$ 42,507.00

The standing of the Professional Departments for the year 1879-80 will appear as follows:

Law Department—Salaries.....\$6,600.00

Estimated tuition.....\$6,500.00

Estimated graduation fees..... 500.00—\$7,000.00

Medical Departments—salaries.....\$9,725.00

Estimated tuition.....\$4,920.00

Estimated graduation fees..... 600.00—\$5,520.00

From the above it will appear that the receipts from students in the Law Department are in excess of salaries paid.

In the Medical Departments there is a very great advance toward making the department, self-sustaining.

Since students in the Homœopathic Medical Department receive part of their lecturers from professors in the Medical Department, it is impossible to separate the two in matter of salaries and receipts.

The number of students enrolled in each of the two departments bears about the same ratio to the salaries paid in each.

## ENROLLMENT OF STUDENTS—1879-80.

Collegiate Department.....	230
Law Department.....	124
Medical Department.....	120
Homœopathic Medical Department.....	42

Total enrolled to November 1, 1879..... 516

In the Collegiate Department there are:

Resident graduates.....	1
Senior class.....	46
Junior class.....	32
Sophomore class .....	55
Freshman class and Irregular.....	96
Total.....	<u>230</u>

The Law Department has—

In first class.....	120
In advanced class.....	12
Total.....	<u>132</u>
Less twice counted.....	8
	<u>124</u>

The appropriations for the year 1879–80 are as follows:

For salaries as detailed above .....	\$ 42,507.00
For executive committee.....	50.00
For incidental expenses and repairs .....	1,500.00
For fuel and wood-cutting.....	500.00
For music in chapel.....	40.00
For opera-house expenses (commencement exercises).....	100.00
For advertising and printing .....	600.00
For catalogue for 1879–80 and postage .....	550.00
For material for medical departments.....	1,035.00
For commencement expenses .....	450.00
For gas bills .....	200.00
For care of grounds .....	150.00
For outstanding bills.....	800.00
For traveling expenses of president ....	100.00
For hospital fund and clinics for medical department .....	200.00
For hospital fund and clinics for homœopathic medical department .....	200.00
For assistant teaching in elocution .....	350.00
For law library .....	750.00
For general library.....	1,800.00
For scientific apparatus .....	1,400.00
For maps and charts .....	100.00
For medical library .....	250.00
For homœopathic medical library .....	150.00
For Prof. Calvin in collecting for museum .....	150.00
For medical apparatus and charts .....	300.00
Total appropriation from general funds .....	<u>\$ 53,232.00</u>

Special appropriation out of Special Repair Fund, for steam heating ..... \$2,500.00

As part of the work entered upon in expenditure of the special appropriation of ten thousand dollars is yet incomplete it is not possible to give the exact figures. But there will remain after present contracts are completed something over \$1,000 to be applied as designated in the act, to the erection of fences and to the completion of stone walks, a sum amply sufficient for the purposes contemplated in the appropriation.

The Regents take pleasure in stating that all their plans as set forth in their report asking for a special appropriation for repairs and for a permanent endowment fund have been fully entered upon, and, so far as possible, have been completed.

All the buildings have been put in a state of thorough repair, and painted and calcimined. Upon all outside work there have been placed three coats of good paint and one coat of sand. Stone walks have been laid, but are not yet quite completed. The central building has been furnished with apparatus for steam heating.

The Departments of Natural Science and of Physical Science have received much needed accessions in the matter of apparatus. The libraries have been enlarged and better accommodations furnished them.

A Lady Professor has been employed with special reference to the interests of lady students, who also does the full work of one professor.

Better provisions have been made for study rooms during the hours when students are not in recitation, and specially increased accommodations for the use of young ladies.

All the conditions enjoined upon us by the legislature have been fully met, and we gratefully acknowledge the benefits that have come to the University through the acts of 1878.

The Regents would here call attention to the reports of the several officers, hereto attached.

The rapid growth of the University in its higher classes renders it necessary to increase all our appliances for instruction. We would express our gratitude for past favors, first, by making wise use of the means furnished us, and, secondly, by developing plans which shall keep the University up to the needs of the State.

Our Permanent Endowment will be of great service in this direction, but we shall soon need more room, and should we be found in the future asking for a supply of that need, the citizens of Iowa will find

abundant ground for such a request in the acceptance of advantages furnished her young men and women through the liberal endowment already made.

Placing ourselves, as was the evident purpose of the legislature of 1878, upon the high ground of an institution furnishing the best possible facilities for collegiate and professional education, and suspending all work which can be well done in the High Schools of the State, we ask for a continuance of the favor already shown, and for such additional means as the wants of a rapidly growing State shall demand for her highest institution of learning.

C. W. SLAGLE,

L. W. ROSS,

H. C. BULIS,

*Committee of the Board of Regents.*

## TREASURER'S REPORT.

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### ASSETS OF THE STATE UNIVERSITY OF IOWA, JUNE 15. 1878.

Interest bearing mortgage notes .....	\$199,645.09
Contract notes taken in part payment of University lands.....	6,835.25
Saline fund.....	4,106.85
Cash on hand.....	4,260.07
<hr/>	
Total working capital.....	\$214,847.26
Property purchased at sheriff's sale.....	2,100.00
Lands unsold—estimated value.....	13,500.00
<hr/>	
Total assets.....	\$230,447.26

### ASSETS, JUNE 15, 1879.

Interest bearing mortgage notes.....	\$177,219.31
Contract notes on lands sold.....	5,482.85
Saline fund....	4,106.85
Cash on hand .....	32,038.25
<hr/>	
Total working capital.....	\$218,847.26
Property purchased at sheriff's sale.....	2,100.00
Lands unsold—estimated value.....	13,500.00
<hr/>	
Total assets....	\$234,447.26

### ASSETS, NOVEMBER 1, 1879.

Interest bearing mortgage notes.....	\$194,049.28
Contract notes on lands sold.....	4,743.18
Saline fund.....	4,106.85
Cash on hand.....	15,947.95
<hr/>	
Total working capital.....	\$218,847.26
Property purchased at sheriff's sale .....	2,100.00
Lands unsold—estimated value.....	13,500.00
<hr/>	
Total assets .....	\$234,447.26



The principal fund since last report, September 30, 1877, was in report of amount for June 15, 1878, reduced \$3,500, by purchase of foreclosed lands on mortgage, as follows: w hf sw qr, ne sw, sw nw, 5 acres off w side, e hf sw se, and e hf w hf sw se, in sec 23, and ne nw 26, and se se 22, all in tp 80, r 8 west, in Johnson county.

And the said fund, it will be observed, was increased in report of amount for June 15, 1879, \$4,000. Said increase was the result of the re-sale of part of the above purchased lands, as follows: w hf sw, ne sw, sw nw, 5 acres off west side e hf sw se, e hf w hf sw se, in sec 23, and ne nw sec 26, all in tp 80, range 8 west.

The total increase of the permanent fund by such purchase and sale, as will appear from comparison of reports, is the sum of \$500.00.

The unsold lands of the University are located as follows:

Dallas county.....	110	acres.
Davis county.....	1,037	36-100 acres.
Decatur county.....	280	acres.
Lucas county.....	232	34-100 acres.
Union county.....	40	acres.
Wapello county.....	280	acres.
Warren county .....	80	acres.

SALINE LANDS.

Appanoose county.....	1,895	75-100 acres.
Davis county.....	40	acres.
Decatur county.....	160	acres.
Lucas county .....	600	acres.
Monroe county .....	160	acres.
Wayne county .....	311	32-100 acres.
Donated lands .....	560	acres.
Lands purchased at sheriff's sale .....	160	acres.
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Total lands.....	5,946	80-100 acres.

EXHIBIT,

*Showing the Income of the University from June 25, 1877, to June 15, 1879.*

I. JUNE 25, 1877, TO JUNE 15, 1878.

Received tuition Law department.....	\$5,030.00
Received tuition Academical department.....	2,930.00
Received tuition Medical departments.....	2,565.00
Received Graduation fees .....	594.50
Received State appropriations.....	35,592.76
Received for gun lost by student .....	20.66
Received for rent on Crousetown property .....	10.00
Received interest on Permanent Fund loaned .....	23,095.92

II. JUNE 15, 1878, TO JUNE 15, 1879.

Received tuition Law department.....	\$5,541.66	
Received tuition Academical department....	4,029.95	
Received tuition Medical departments.....	2,587.00	
Received Graduation fees .....	455.00	
Received from State appropriations .....	25,000.00	
Received from interest on Permanent Fund loaned.....	17,673.91	
Total income for two years.....	\$125,126.36	
Balance overdrawn last report.....	\$5,002.38	
Disbursed incidental bills Treasurer's office, for 1878...	67.90	
Disbursed incidental bills Treasurer's office, for 1879...	2.50	
Disbursed on Secretary's warrants for the year ending		
June 15, 1878.....	53,075.91	
Disbursed on Secretary's warrants for the year ending		
June 15, 1879.....	63,362.89	
	\$121,511.58	
Balance on hand June 15, 1879.....	\$3,614.78	\$125,126.36

Respectfully submitted,

J. F. COLDREN, *Treasurer.*

## SECRETARY'S REPORT.

## EXPENDITURES.

*The following Exhibit shows the Expenditures of the Income Fund of the University from October 1, 1877, to October 1, 1879, being a list of the Warrants drawn on the Treasurer of the Institution for that period.*

*It also shows for what General Purposes the Money was expended, to-wit:*

DATE.	Number of Warrants.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1877.				
Oct. 1	569	Prof. L. F. Parker	Salary on account	\$ 145.00
Oct. 1	570	Prof. S. N. Fellows	Salary on account	145.00
Oct. 2	571	A. C.	Homeopathic appropriation	40.27
Oct. 3	572	Prof.	Salary on account	140.00
Oct. 8	573	C. M.	Anatomical appropriation	80.00
Oct. 9	574	C. W.	Incident	14.50
Oct. 5	575	Prest. C. W. Slagle	One qu	700.00
Oct. 5	576	Chancellor Hammond	Salary on account	200.00
Oct. 5	577	Charles Wale & Co.	Hinrich's	143.50
Oct. 5		Loward & Co.	Advertisin	5.25
Oct. 5		n & Son	Incident	4.80
Oct. 5		Barry	Grounds	6.87
Oct. 5		Irish	Printing	14.50
Oct. 5		& P. R. R. Co.	Hinrich's	2.50
Oct. 8		F. Loughridge	Salary on account	100.00
Oct. 8		igler	Military appropriation	1.20
Oct. 9		loyt	Incidental appropriation	80.00
Oct. 10		Preston	Salary on account	100.00
Oct. 12		Slagle	Homeopathic, 90c.; incidental, \$17.06.	17.96

## EXPENDITURES—CONTINUED.

DATE.	Number of warrants	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1877.				\$
Oct. 13	588	George Tomlin.....	Additional janitor appropriation.....	38.00
Oct. 15	589	M. D. Wood .....	Commencement expenses.....	5.35
Oct. 16	590	B. F. Hoyt.....	Additional janitor appropriation .....	4.00
Oct. 17	591	G. W. Schell.....	Fuel.....	1.42
Oct. 17	592	Prof G. T. Pinkham .....	Salary on account.....	50.00
Oct. 20		ee.....	Homeopathic appropriation.....	37.50
Oct. 20		.....	Salary on account.....	100.00
Oct. 22		.....	Printing appropriation.....	16.35
Oct. 22		.....	Salary on account.....	100.00
Oct. 22		.....	.....	75.00
Oct. 23	598	Lawrence Rooney.....	wood .....	5.15
Oct. 23	599	Prof A. N. Currier.....	.....	200.00
Oct. 25		.....	.....	18.50
Oct. 26		.....	rent.....	10.40
Oct. 27	602	Allin, Wilson & Smith.....	books .....	106.90
Oct. 27	603	John P. Irish.....	.....	16.00
Oct. 29	604	Miller & Richardson .....	.....	5.10
Oct. 29	605	Ham & Carver.....	.....	20.15
Oct. 29	606	W. J. Shoup & Co.....	Advertising University.....	31.40
Oct. 29	607	Hawk-Eye Publishing Co.....	Advertising University.....	20.10
Oct. 29	608	Iowa State Leader.....	Advertising University.....	5.10
Oct. 29	609	D. Van Nostrand.....	Chair of Civil Engineering.....	5.51
Oct. 29	610	Iowa State Register.....	Advertising University.....	30.15
Oct. 29	611	W. W. Junkin.....	Advertising University.....	5.10
Oct. 29	612	The Gazette.....	Advertising University.....	16.15
Oct. 29	613	Woodruff & Perkins.....	Advertising University.....	10.10
Oct. 29	614	R. H. Moore.....	Advertising University.....	5.10
Oct. 29	615	W. W. Junkin.....	Printing and advertising appropriation.....	88.75

Oct. 20	.....	ity.....	10.10
Oct. 20	.....	.....	20.15
Oct. 29	.....	W Library, \$5.....	45.00
Oct. 29	.....	.....	15.15
Oct. 29	.....	.....	39.00
Oct. 29	.....	.....	50.00
Oct. 30	.....	.....	86.64
Oct. 30	.....	.....	385.00
Oct. 31	.....	.....	135.00
Oct. 31	.....	.....	140.00
Oct. 31	.....	.....	46.35
Nov. 3	.....	.....	140.00
Nov. 3	.....	.....	39.25
Nov. 3	.....	.....	86.50
Nov. 8	.....	.....	15.50
Nov. 8	.....	.....	145.00
Nov. 3	.....	.....	350.00
Nov. 9	.....	.....	225.00
Nov. 10	.....	Incidental, \$5.50....	38.50
Nov. 11	.....	.....	39.75
Nov. 11	.....	.....	100.00
Nov. 13	.....	.....	100.00
Nov. 13	.....	.....	10.70
Nov. 14	.....	.....	130.00
Nov. 14	.....	.....	1.40
Nov. 15	.....	.....	4.00
Nov. 15	.....	.....	100.61
Nov. 16	.....	.....	90.29
Nov. 17	.....	.....	38.80
Nov. 17	.....	.....	5.00
Nov. 17	.....	.....	80.00
Nov. 17	.....	.....	17.15
Nov. 17	.....	.....	6.10
Nov. 17	.....	.....	24.20
Nov. 17	.....	.....	55.25
Nov. 17	.....	.....	52.65
Nov. 17	.....	.....	1.70
Nov. 20	.....	.....	.90
Nov. 21	.....	.....	

**EXPENDITURES--CONTINUED.**

DATE.	Number of Warrant	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1877.				
Nov. 22	654	Dr. E. F. Clapp.....	Dissecting material ...	\$250.00
Nov. 22	655	Carl Vogt.....	rent.....	10.40
Nov. 24	656	M. B. Bloom.....	"	30.00
Nov. 24	657	W. P. Coast.....	"	67.87
Nov. 24	658	C. K. Pittman.....	"	9.00
Nov. 24	659	Marsh & Holnber.....	"	44.80
Nov. 26	660	Wm. Hoenschubahr.....	"	144.50
Nov. 26	661	Miss S. F. Loughridge.....	Medical Rooms, \$110; Homeopathic, \$84.50.....	25.00
Nov. 26	662	N. H. Edgerton.....	Salary on account.....	8.10
Nov. 26	663	Prof. N. R. Leonard.....	Observatory appropriation .....	140.00
Nov. 26	664	K. E. Backenstos.....	Salary first quarter, in full .....	8.15
Nov. 26	665	Harmen Ruppini.....	Fuel appropriation .....	50.00
Nov. 28	666	George W. Langberg.....	Salary for one month .....	8.00
Nov. 28	667	Prof. G. L. Pinkham.....	Natural Science Chair.....	50.00
Nov. 28	668	Wm. Osmond.....	Salary on account.....	100.00
Nov. 30	669	Prof. Samuel Calvin.....	"	145.00
Nov. 30	670	O. Moore.....	"	2.00
Nov. 30	671	Prof. Gustavus Hinrichs.....	"	425.00
Nov. 30	672	George Hammer.....	"	4.30
Nov. 30	673	Prof. L. F. Parker.....	"	140.00
Nov. 30	674	Miss M. E. Apthorp.....	"	125.00
Nov. 30	675	Prof. O. C. Howe.....	"	225.00
Nov. 30	676	Prof. C. A. Eggert.....	"	40.00
Nov. 30	677	George W. Marquardt.....	"	14.50
Nov. 30	678	Prof. J. C. Shrader.....	"	50.00
Dec. 1	679	U. S. Express Co.....	, \$26.06; Library, \$1.60 .....	27.66
Dec. 1	680	Chancellor Hammond.....	"	425.00
Dec. 1	681	Prof. P. H. Philbrick.....	"	\$25.00

Dec.	1	682	Prof. A. C. Cowperthwaite.	.....	.....	60.90
Dec.	1	683	Prof. S. N. Fellows	.....	.....	135.00
Dec.	3	684	M. Ryan & Son	.....	.....	1.20
Dec.	7	685	C. W. von Coelln.	.....	.....	25.00
Dec.	8	686	H. W. Boerner & Son	.....	.....	18.40
Dec.	8	687	Michael Shubert	.....	.....	5.62
Dec.	8	688	I. S. Frazee	.....	.....	14.00
Dec.	8	689	James Lee	.....	.....	169.09
Dec.	8	690	Prof. A. N. Currier	.....	.....	225.00
Dec.	10	691	G. W. Dunham	.....	.....	.....
Dec.	10	692	E. Bixby	.....	.....	.....
Dec.	10	693	A. C. Cowperthwaite	.....	.....	16.29
Dec.	10	694	Prof. A. C. Cowperthwaite.	.....	.....	82.10
Dec.	11	695	Wm. J. Haddock	.....	.....	125.00
Dec.	11	696	George Tomlin	.....	.....	200.00
Dec.	11	697	Prof. G. L. Pinkham	.....	.....	84.40
Dec.	13	698	B. F. Hoyt	.....	.....	140.00
Dec.	13	699	Prof. W. H. Dickinson	.....	.....	4.00
Dec.	13	700	Wm. Green	.....	.....	475.00
Dec.	13	701	W. F. Hill	.....	.....	5.00
Dec.	14	702	.....	.....	.....	5.35
Dec.	15	703	.....	.....	.....	100.00
Dec.	15	704	.....	.....	.....	12.82
Dec.	17	705	Prof. W. S. Robertson	.....	.....	10.40
Dec.	17	706	Prof. W. D. Middleton	.....	.....	475.00
Dec.	17	707	Prof. A. N. Currier	.....	.....	475.00
Dec.	18	708	Prof. W. F. Peck	.....	.....	200.00
Dec.	18	709	David Brant	.....	.....	475.00
Dec.	18	710	Prest. C. W. Slagle	.....	.....	16.50
Dec.	18	711	C. W. Slagle	.....	.....	700.00
Dec.	19	712	John Glenn	.....	.....	8.50
Dec.	19	713	Harmon Rupp	.....	.....	13.11
Dec.	19	714	William Osmond	.....	.....	50.00
Dec.	20	715	George Tomlin	.....	.....	75.00
Dec.	20	716	Prof. C. M. Hobby	.....	.....	10.85
Dec.	20	717	S. N. Fellows	.....	.....	250.00
Dec.	20	718	Judge O. C. Howe	.....	.....	9.35
Dec.	20	719	Prof. P. J. Farnsworth	.....	.....	150.00
Dec.	20		.....	.....	.....	500.00
			Fuel appropriation	.....	.....	.....
			Homeopathic appropriation, rent	.....	.....	.....
			Salary on account	.....	.....	.....
			Salary on account	.....	.....	.....
			Library	.....	.....	.....
			Salary on account	.....	.....	.....
			Advertising University	.....	.....	.....
			Salary	.....	.....	.....
			Incidental appropriation	.....	.....	.....
			Incidental appropriation	.....	.....	.....
			Salary on account	.....	.....	.....
			Salary on account	.....	.....	.....
			Fuel appropriation, sawing wood	.....	.....	.....
			Salary on account	.....	.....	.....
			Chair of Didactics	.....	.....	.....
			Salary on account	.....	.....	.....
			Salary on account	.....	.....	.....

## EXPENDITURES—CONTINUED.

DATE.	Number of Warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1877.				
Dec. 20	720	Miss S. F. Loughridge.....	Salary on account.....	150.00
Dec. 21	721	Prof. N. R. Leonard.....	Salary on account.....	140.00
Dec. 21	722	John N. Coldren.....	Salary.....	450.00
Dec. 21	723	Prof. J. C. Shrader.....	Salary on account.....	875.00
Dec. 28	724	Prof. G. Hinrichs.....	Medical salary.....	225.00
Dec. 28	725	A. W. Lee & Co.....	Incidental.....	9.77
Dec. 31	726	Prof. S. N. Fellows.....	Salary on account.....	200.00
Dec. 31	727	Prof. C. A. Eggert.....	Salary on account.....	145.00
Dec. 31	728	Prof. Samuel Calvin.....	Salary on account.....	140.00
Dec. 31	729	William Green.....	One month's pay, medical janitor.....	40.00
Dec. 31	730	Prof. L. F. Parker.....	Salary on account.....	140.00
Dec. 31	731	A. K. Campbell.....	Incidental appropriation.....	10.00
1878.				
Jan. 2	732	N. H. Tulloss & Co.....	Incidental.....	5.25
Jan. 3	733	W. M. Martin.....	Incidental.....	12.94
Jan. 3	734	Miss P. Scofield.....	Salary on account.....	250.00
Jan. 4	735	A. C. Cowperthwaite.....	.....	43.70
Jan. 5	736	Levi Robinson.....	.....	50.00
Jan. 5	737	Wm. N. Chalfant.....	.....	2.50
Jan. 6	738	K. E. Backenstos.....	.....	6.85
Jan. 5	738	E. F. Clapp.....	.....	105.00
Jan. 5	739	James Lee.....	.....	18.25
Jan. 10	740	Brant & Co.....	.....	7.75
Jan. 10	741	George Tomlin.....	.....	83.00
Jan. 11	742	F. X. Rettenmeyer.....	.....	5.35
Jan. 15	743	Carl Vogt.....	Homeopathic appropriation, rent.....	10.40
Jan. 15	744	John Schneider.....	Incidental.....	2.25
Jan. 15	745	H. F. Hoyt.....	Observatory janitor.....	4.00





## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.			
1878.				
Feb. 13	784	Prof. A. N. Currer	Salary on account.	225.00
Feb. 16	785	Prof. O. C. Howe	Salary on account.	175.00
Feb. 16	786	Prof. C. M. Hobby	Salary on account.	250.00
Feb. 16	787	Prof. A. C. Cowperthwaite	Salary on account.	250.00
Feb. 19	788	Harmon Rupp	One month's salary.	50.00
Feb. 22	789	Prof. W. H. Dickinson	Salary on account.	237.50
Feb. 22	790	Prof. W. H. Dickinson	Salary on account.	237.50
Feb. 22	791	Carl Vogt	Homeopathic appropriation, rent.	10.40
Feb. 23	792	Prof. C. A. Eggert	Salary on account.	130.00
Feb. 25	793	Prof. N. R. Leonard	Salary on account.	145.00
Feb. 26	794	Wm. Marshall	Incidental appropriation.	7.10
Feb. 26	795	George F. Henry	Commencement incidentals.	10.00
Feb. 26	796	John N. Rogers	Pay for Law Lectures.	12.00
Feb. 26	797	David Ryan	Commencement incidentals.	5.00

Feb. 28	.....	.....	145.00
March 1	.....	.....	145.00
March 1	.....	.....	75.00
March 1	.....	.....	89.28
March 1	.....	.....	10.10
March 1	.....	.....	20.20
March 1	.....	.....	425.00
March 1	.....	.....	88.00
March 2	.....	.....	5.70
March 2	.....	.....	4.73
March 4	.....	.....	225.00
March 4	.....	.....	475.00
March 4	.....	.....	475.00
March 4	.....	.....	325.00
March 4	.....	.....	850.00
March 5	.....	.....	475.00
March 5	.....	.....	450.00
March 5	.....	.....	98.70
March 6	.....	.....	44.75
March 6	.....	.....	100.00
March 6	.....	.....	89.00
March 6	.....	.....	3.15
March 6	.....	.....	100.00
March 8	.....	.....	50.88
March 9	.....	.....	232.68
March 9	.....	.....	10.45
March 13	.....	.....	4.00
March 13	.....	.....	22.55
March 15	.....	.....	9.00
March 15	.....	.....	18.15
March 16	.....	.....	10.00
March 16	.....	.....	51.00
March 16	.....	.....	12.10
March 16	.....	.....	10.00
March 16	.....	.....	26.00
March 21	.....	.....	100.00
March 23	.....	.....	75.00
March 28	.....	.....	61.20

\$34; fuel, \$16.88  
 carrier's, \$25; Fellows, \$10.

## EXPENDITURES—CONTINUED.

DATE.	Number of warrants	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				
March 23	850	V. Stickler.....	.....	.95
March 25	851	Georg.....	.....	32.50
March 25	852	Harm.....	.....	50.00
March 26	853	Prest.....	.....	700.00
March 27	854	S. E. L.....	.....	50.00
March 28	855	J. S. Frazee.....	.....	12.00
March 28	856	Prof. G. L. Pinkham.....	.....	180.00
March 28	857	Wm. Osmond.....	.....	100.00
March 28	858	Prof. S. N. Fellows.....	.....	150.00
March 28	859	Prof. Samuel Calvin.....	.....	140.00
March 30	860	Prof. L. F. Parker.....	.....	140.00
March 30	861	Miss M. E. Apthorp.....	.....	76.00
March 30	862	Mercy Hospital Sisters.....	.....	10.00
April 1	863	Prof. N. R. Leonard.....	.....	145.00
April 2	864	T. J. Rigg.....	.....	5.00
April 3	864	Prof. C. A. Eggert.....	.....	145.00
April 3	865	Wm. M. Martin.....	.....	5.80
April 4	866	B. F. Hoyt.....	.....	85.00
April 6	867	Wm. M. Martin.....	.....	5.15
April 8	869	Allin, Wilson & Smith.....	.....	9.70
April 8	869	Allin, Wilson & Smith.....	.....	5.00
April 8	869	Allin, Wilson & Smith.....	.....	1.20
April 8	869	Allin, Wilson & Smith.....	.....	32.58
April 8	869	Allin, Wilson & Smith.....	.....	12.80
April 8	869	Allin, Wilson & Smith.....	.....	0.15
April 8	869	Allin, Wilson & Smith.....	.....	14.45
April 9	870	Captain Owen, P. M. ....	.....	63.92
April 10	871	Henry Holt & Co.....	.....	8.85



## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				
May 13	910	Prof. P. H. Philbrick.....	Salary on account.....	50.00
May 13	911	Iowa City Republican.....	Printing appropriation.....	16.15
May 13	912	Wm. Wardemaum.....	Chair of Mathematics.....	2.10
May 14	913	Prof. G. L. Pinkham.....	Salary on account.....	50.00
May 14	914	Carl Vogt.....	Homeopathic appropriation, rent.....	10.40
May 18	915	James Barry.....	Grounds appropriation.....	10.00
May 20	916	C. W. Slagle.....	Incidental expenses on committee, etc.....	125.90
May 20	917	L. W. Ross.....	Incidental expenses on committee, etc.....	8.20
May 20	918	A. K. Campbell.....	Incidental expenses on committee, etc.....	40.00
May 20	919	John F. Duncombe.....	Incidental expenses on committee, etc.....	16.20
May 20	920	A. T. Reeve.....	Incidental expenses on committee, etc.....	205.00
May 20	921	W. C. Preston.....	Incidental expenses on committee, etc.....	100.00
May 21	922	B. F. Hoyt.....	Salary on account.....	4.00
May 23	923	Judge A. Adams.....	Observatory janitor.....	100.00
May 25	924	James Barry.....	Salary in full.....	6.00
May 25	925	Prof. L. F. Parker.....	Work on lawn.....	175.00
May 25	926	Jansen, McClurg & Co.....	Salary on account.....	74.91
May 25	927	D. G. Francis.....	Chair of Didac., \$30.65; Greek, \$6.64; Eng., \$12; Lib., \$25.62.	18.55
May 25	928	John Allyn.....	Greek Chair.....	14.25
May 25	929	Allin, Wilson & Smith.....	Greek Chair.....	6.80
May 25	930	A. N. Currier.....	English Chair.....	100.00
May 27	931	Chas. Wachsmuth.....	General Lit.....	26.00
May 27	932	Miss S. F. Loughbridge.....	Chair of Nat.....	60.00
May 29	933	Judge O. C. Howe.....	Salary on account.....	125.00
May 30	934	Harmon Ruppini.....	Salary on account.....	50.00
May 30	935	Wm. G. Hammond.....	One month's salary.....	91.90
May 30	936	John D. Parsons.....	Advertising Law Department.....	47.00
May 30	937	Chancellor Hammond.....	Law Library.....	625.00
			Salary on account.....	



EXPENDITURES—CONTINUED.

DATE.	Number of Warrant.	AMOUNT.
1878.		
June 12	976 Cha	625.00
June 12	977 Wm	400.00
June 12	978 Joh	600.00
June 12	979 Prof	425.00
June 12	980 Pete	50.00
June 13	981 B. F	5.00
June 15	982 Hen	8.25
June 15	983 Geor	10.00
June 15	984 Jam	7.80
June 15	985 Micl	6.30
June 21	986 Pres	25.00
June 21	987 Rev	50.00
June 21	988 J. B.	30.00
June 21	989 Finl	12.70
June 21	990 Geor	51.25
June 21	991 Brai	22.00
June 22	992 Phil	19.85
June 24	993 H. S	38.92
June 24	994 Wm	16.10
June 24	995 Mrs	9.15
June 24	996 U. S	20.25
June 24	997 Wm	11.87
June 24	998 How	456.35
June 25	999 Cha	16.00
June 26	1000 Low	95.00
June 27	1001 Alb	12.05
June 28	1002 Col.	23.00
June 29	1003 J. B	9.00





## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.			
1878.				
July 31	1042	Michael Boarts.....	Homeopathic building appropriation.....	10.00
Aug. 3	1043	James Barry.....	Lawn mowing appropriation.....	6.00
Aug. 3	1044	Wm. N. Chalfant.....	Repair fund.....	127.62
Aug. 3	1045	M. Ryan & Son.....	Paint, repair fund.....	173.06
Aug. 3	1046	Allin, Wilson & Smith.....	Outstanding bills, envelopes.....	7.30
Aug. 6	1047	William Marshall.....	Repair fund, freight on slate.....	4.90
Aug. 7	1048	John N. Coldren.....	Envelopes, outstanding bills, opera house.....	71.00
Aug. 7	1049	Chicago Journal.....	Advertising University.....	10.10
Aug. 9	1050	Iowa State Register.....	Copies of advertising appropriation.....	4.10
Aug. 9	1051	Mills & Co.....	Diplomas, c.....	110.00
Aug. 9	1052	Wm. Wood & Co.....	Advertising.....	56.00
Aug. 9	1053	B. Westerman & Co.....	Books, out.....	3.55
Aug. 9	1054	Wm. G. Hammond.....	Law advertising, \$20.75; Law Library, \$33.50.....	54.25
Aug. 10	1055	Wm. N. Chalfant.....	Repair fund.....	146.95
Aug. 10	1056	James Barry.....	Repair fund, \$2.50; lawn work, \$6.....	8.50
Aug. 10	1057	O. Moore.....	Repair fund, plastering.....	12.00
Aug. 10	1058	John P. Irish.....	Repair fund, \$4; printing, \$19.....	23.00
Aug. 10	1059	Smith, Roarts & Bixby.....	Homeopathic building.....	450.00
Aug. 13	1060	Iowa City Gas Co.....	Gas, outstanding bills.....	472.55
Aug. 13	1061	George Tomlin.....	Painting, repair appropriation.....	75.00
Aug. 17	1062	W. N. Chalfant.....	Workmen's pay, repair fund.....	112.75
Aug. 17	1063	M. Ryan & Son.....	White lead, repair fund.....	119.10
Aug. 19	1064	T. Chambers.....	Sand, repair fund.....	.35
Aug. 19	1065	Capt. James C. Chester.....	Repairing arms, military appropriation.....	28.15
Aug. 20	1066	Wm. N. Chalfant.....	Repair fund.....	12.00
Aug. 20	1067	Carl Vogt.....	Homeopathic appropriation, rent.....	10.00
Aug. 22	1068	C. F. Lovelace.....	Plans and estimates, repair fund.....	30.00
Aug. 23	1069			

Aug.	.....	137.05
Aug.	.....	131.62
Aug.	.....	22.25
Aug.	.....	50.00
Aug.	.....	6.50
Aug.	.....	80.00
Aug.	.....	75.00
Aug.	.....	50.00
Aug.	.....	1.35
Aug.	.....	3.20
Aug.	.....	50.00
Aug.	.....	150.00
Aug.	.....	16.74
Aug.	.....	52.00
Aug.	.....	9.00
Aug.	.....	134.00
Aug.	.....	10.00
Aug.	.....	20.55
Sept.	.....	50.00
Sept.	.....	5.50
Sept.	.....	80.00
Sept.	.....	1.35
Sept.	.....	24.00
Sept.	.....	8.00
Sept.	.....	157.55
Sept.	.....	390.00
Sept.	.....	639.43
Sept.	.....	8.00
Sept.	.....	75.00
Sept.	.....	50.00
Sept.	.....	50.00
Sept.	.....	116.25
Sept.	.....	11.30
Sept.	.....	6.10
Sept.	.....	66.68
Sept.	.....	140.46
Sept.	.....	112.00
Sept.	.....	104.00

## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				
Sept.	14	1107 Wm. N. Chalfant.	Carpenter's pay, repairs	83.85
Sept.	14	1108 James Barry.	Grounds appropriation.	6.00
Sept.	14	1109 Frank Albeskey	Sand hauling, repair appropriation.	85.80
Sept.	16	1110 N. Berry & Son	Plumbing, repair fund.	85.00
Sept.	18	1111 M. Ryan & Son	Frescoing, repair fund	150.00
Sept.	19	1112 Mrs. Jas. Barry	Scrubbing Homeopathic rooms.	3.75
Sept.	21	1113 John P. Irish	Printing appropriation	15.50
Sept.	21	1114 U. S. Express Co.	Incidental expenses.	4.45
Sept.	21	1115 E. Bixby	Stoves, etc., repair appropriation	83.06
Sept.	21	1116 James Barry.	Work on lawn	4.70
Sept.	21	1117 B. H. Wilde.	Cement lime, repair appropriation.	9.90
Sept.	21	1118 Wm. N. Chalfant	Carpenter's pay, repair fund.	48.56
Sept.	21	1119 A. K. Campbell	Committee work, incidental	32.00
Sept.	21	1120 J. N. Seydel.	Stoves, etc., repair appropriation.	25.60
Sept.	21	1121 C. J. Hibwell.	Slate and slating, repair appropriation	245.83
Sept.	21	1122 A	Homeopathic, incidental	6.25
Sept.	21	1123 F		1.68
Sept.	23	1124 W		39.95
Sept.	24	1125 C.		15.85
Sept.	24	1126 M	pair fund	888.94
Sept.	24	1127 Jc		96.50
Sept.	25	1128 T.		9.85
Sept.	25	1129 P		100.00
Sept.	26	1130 Prof. O. C. Howe	Salary on account	100.00
Sept.	26	1131 Prof. A. N. Currier	Salary on account	100.00
Sept.	26	1132 A. N. Currier	Library appropriation.	100.00
Sept.	27	1133 Willis M. Mitchell	Frescoing, etc., repair fund	157.00
Sept.	28	1134 H. C. Smith.	Stone walk, on account.	50.00

100.00	.....
52.32	10, Ch. Didactica \$5.
8.75	\$4.40
175.85	.....
80.90	.....
10.75	.....
5.50	.....
59.55	.....
6.65	.....
100.00	.....
50.00	.....
100.00	.....
100.00	.....
100.00	.....
569.18	1 .....
50.00	.....
4.21	.....
100.00	.....
382.58	.....
8.00	.....
7.25	.....
16.75	.....
15.50	.....
71.42	.....
6.00	.....
21.00	.....
75.00	.....
39.50	propriation \$35
100.00	.....
4.70	.....
50.00	.....
9.50	.....
12.25	.....
6.00	.....
83.00	.....
3.50	.....
42.50	.....
38.75	.....
500.00	.....

Sept.	28	1135	Prof. N. R. Leonard.....
Sept.	28	1136	Jansen, McClurg & Co.....
Sept.	28	1137	David G. Francis.....
Sept.	28	1138	C., R. I. & P. R. Co.....
Sept.	28	1139	E. Bixby.....
Sept.	28	1140	John P. Frisk.....
Sept.	28	1141	.....
Sept.	28	1142	.....
Sept.	28	1143	.....
Sept.	30	1144	Prof. L. F. Parker.....
Sept.	30	1145	Miss M. E. Aphorp.....
Sept.	30	1146	Prof. S. N. Fellows.....
Sept.	30	1147	Prof. C. A. Eggert.....
Sept.	30	1148	Maresh & Holubar.....
Oct.	1	1149	Harmon Running.....
Oct.	1	1150	..... Co.....
Oct.	1	1150	.....
Oct.	4	1151	.....
Oct.	5	1152	.....
Oct.	5	1153	J. Davis Wilder.....
Oct.	5	1154	Peter Weber.....
Oct.	5	1155	Prather & Clinton.....
Oct.	5	1156	C., R. I. & P. R. Co.....
Oct.	6	1157	James Barry.....
Oct.	6	1158	Wm. N. Chalfant.....
Oct.	7	1159	Prof. W. C. Preston.....
Oct.	8	1160	Nixon & Doe.....
Oct.	9	1161	Prof. T. H. McBride.....
Oct.	12	1162	American Metric Bureau.....
Oct.	12	1162	H. C. Smith.....
Oct.	12	1163	John P. Irish.....
Oct.	12	1164	Wm. N. Chalfant.....
Oct.	12	1165	Dennis Murphy.....
Oct.	12	1166	George Tomlin.....
Oct.	12	1167	James Barry.....
Oct.	12	1168	James Lee.....
Oct.	12	1169	Iowa City Republican.....
Oct.	14	1170	Isaac Nobes.....

## EXPENDITURES—CONTINUED.

DATE.	Number of Warrant	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				
Oct.	16	1171 E. F. Clapp .....	material.....	850.00
Oct.	19	1172 Banks Brothers.....	.....	278.00
Oct.	19	1173 Wm. G. Hammond.....	.....	70.00
Oct.	19	1174 Wm. G. Hammond.....	.....	10.00
Oct.	19	1175 C. R. I. & P. R. Co.....	.....	70.00
Oct.	19	1176 James Lee .....	.....	41.90
Oct.	19	1177 Wm. N. Chalfant .....	.....	28.17
Oct.	21	1178 Seymour & Saunders .....	.....	16.00
Oct.	21	1179 Decosta H. Dodson.....	.....	4.00
Oct.	24	1180 Samuel Calvin .....	Observatory Janitor.....	51.20
Oct.	24	1181 Professor Phoebe W. Sudlow.....	Books appropriation, Natural Science Chair .....	100.00
Oct.	25	1182 Miss Minnie E. Leonard .....	Salary on account.....	50.00
Oct.	25	1183 Professor N. R. Leonard .....	Incidental Teaching Fund.....	100.00
Oct.	26	1184 President J. L. Pickard .....	Salary on account.....	200.00
Oct.	26	1185 John P. Irish .....	Salary on account.....	11.25
Oct.	26	1186 Benjamin Owen, P. M. ....	Fuel, advertising for wood bids.....	248.04
Oct.	28	1187 Musser & Porter.....	Postage, outstanding bills appropriation.....	505.09
Oct.	28	1188 Jansen, McClurg & Co .....	Lumber, repair fund .....	73.06
Oct.	28	1189 Professor A. N. Currier .....	Pres. expenses, \$3.00; Chair, Latin, \$5.00; Library, \$65.05	100.00
Oct.	28	1190 Wm. A. Fisher .....	Salary on account.....	8.80
Oct.	28	1191 James Barry.....	Hauling sand, repair appropriation .....	7.75
Oct.	29	1192 Mozier & Coast .....	Grading stone walk appropriation.....	182.14
Oct.	30	1193 Judge O. C. Howe.....	8, repair fund.....	100.00
Oct.	31	1194 William Green, Med. Jan .....	logs .....	5.00
Oct.	31	1195 William Green.....	.....	40.00
Oct.	31	1196 Professor C. A. Eggert.....	Salary on account.....	100.00
Oct.	31	1197 Harmon Ruppin.....	One month's salary.....	50.00
Nov.	2	1198 Professor B. N. Fellows .....	Salary on account.....	100.00

.....	100.00
.....	149.37
.....	100.00
.....	50.00
.....	17.40
.....	6.00
.....	150.00
.....	24.01
.....	8.60
.....	44.62
.....	200.00
.....	75.00
.....	51.19
.....	15.35
.....	18.00
.....	100.00
.....	20.20
.....	71.14
.....	99.03
.....	4.00
.....	10.00
.....	19.83
.....	27.75
.....	1.50
.....	8.51
.....	1.05
.....	100.00
.....	53.20
.....	13.90
.....	109.80
.....	51.37
.....	15.47
.....	53.70
.....	28.12
.....	4.00
.....	39.82
.....	200.00
.....	26.85

Nov.	21199	Prof. Samuel Calvin.....
Nov.	21200	Maresh & Holubar.....
Nov.	21201	Prof. L. F. Parker.....
Nov.	21202	Miss M. E. Apthorp.....
Nov.	21203	A. Rowley & Son.....
Nov.	21204	James Barry.....
Nov.	21205	Prof. P. H. Philbrick.....
Nov.	21206	James C. Cochran & Bros.....
Nov.	21207	E. Bixby.....
Nov.	21208	John U. Miller.....
Nov.	21209	Prof. A. C. Cowperthwaite.....
Nov.	41210	Prof. W. C. Preston.....
Nov.	51211	Pryce & Schell.....
Nov.	71212	U. S. Express Co.....
Nov.	91213	Chancellor Hammond.....
Nov.	91214	Prof. T. H. McBride.....
Nov.	91215	Wm. G. Hammond.....
Nov.	91216	H. O. Hutchinson.....
Nov.	91217	H. W. Boerner & Son.....
Nov.	111218	Decosta H. Dodson.....
Nov.	121219	Wm. Green, medical janitor.....
Nov.	181220	John Whetstone.....
Nov.	181221	George Tomlin.....
Nov.	181222	John Funk.....
Nov.	191223	Jacob Boarts.....
Nov.	191224	C. J. Neill.....
Nov.	211225	Prof. Phoebe W. Sudlow.....
Nov.	211226	A. K. Campbell.....
Nov.	221227	A. C. Cowperthwaite.....
Nov.	231228	H. C. Smith.....
Nov.	231229	Shepard & Hess.....
Nov.	231230	Sheets, Geabery & Co.....
Nov.	231231	Wm. Marshall.....
Nov.	231232	Wm. N. Chalfant.....
Nov.	231233	James Barry.....
Nov.	231234	M. Ryan & Son.....
Nov.	231235	W. J. Haddock.....
Nov.	231236	John U. Miller.....

## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				\$
Nov.	231237	E. Bixby.....	Fixing stoves, incidental.....	3.85
Nov.	251238	Isaac Nobes.....	Balance for stone walk.....	63.91
Nov.	251239	John Pickering.....	Lamps, incidental.....	13.50
Nov.	271240	Judge O. C. Howe.....	Salary in full, first quarter.....	225.00
Nov.	271241	Prof. N. R. Leonard.....	Salary on account.....	225.00
Nov.	271242	Prof. S. N. Fellows.....	Salary on account.....	225.00
Nov.	291243	Jansen, McCullurg & Co.....	Library, \$12.00; Greek Ch., \$10; Eng. Ch., \$5; Civ. Eng., \$2.80.....	30.70
Nov.	291244	Prof. A. N. Currier.....	Salary for first quarter in full.....	225.00
Nov.	291245	Prof. W. C. Preston.....	Salary for first quarter in full.....	150.00
Nov.	291246	Prof. L. F. Parker.....	Salary for first quarter in full.....	225.00
Nov.	291247	Miss M. E. Aphthorp.....	Salary for first quarter in full.....	125.00
Nov.	301248	Prof. Samuel Calvin.....	Salary for first quarter in full.....	225.00
Nov.	301249	Harmon Rupp.....	.....	50.00
Nov.	301250	Sisters of Mercy.....	.....	10.00
Nov.	301251	Prof. C. A. Eggert.....	..... in full.....	225.00
Nov.	301252	H. W. Hoerner & Son.....	..... in full.....	29.45
Dec.	21253	Prest. J. L. Pickard.....	..... in full.....	100.00
Dec.	21254	Prof. P. H. Philbrick.....	..... in full.....	275.00
Dec.	21255	Wm. Green.....	..... in full.....	40.00
Dec.	21256	W. U. Telegraph Co.....	..... in full.....	8.97
Dec.	21257	Prof. Gustavus Hinrichs.....	..... in full.....	325.00
Dec.	21258	T. J. Rigg.....	..... in full.....	5.15
Dec.	31259	Prof. T. H. McBride.....	..... in full.....	100.00
Dec.	41260	C. R. I. & P. R. R. Co.....	..... in full.....	4.03
Dec.	51261	T. Carleton.....	..... in full.....	4.30
Dec.	61262	Jacob Hoarts.....	..... in full.....	2.75
Dec.	71263	Chancellor Hammond.....	..... in full.....	625.00
Dec.	71264	John H. Whetstone.....	..... in full.....	28.00



Dec.	.....	35 cords of wood, fuel appropriation.....	140.00
Dec.	.....	Dog appropriation.....	10.00
Dec.	.....	Tin work and stoves, repair fund.....	21.00
Dec.	.....	Observatory janitor.....	4.00
Dec.	.....	Salary on account.....	87.50
Dec.	.....	Salary on account.....	50.00
Dec.	.....	Janitor, additional.....	28.00
Dec.	.....	Brick and masonry, repair appropriation.....	98.75
Dec.	.....	Teaching elocution.....	67.50
Dec.	.....	Salary on account.....	612.50
Dec.	.....	Matting, Homeopathic appropriation.....	22.90
Dec.	.....	Half year salary.....	475.00
Dec.	.....	Half year salary.....	475.00
Dec.	.....	Freight, Nat. Sci. Chair, \$2.60; Library, 75 cts.....	8.35
Dec.	.....	Half year salary.....	475.00
Dec.	.....	Half year salary.....	475.00
Dec.	.....	Salary on account.....	145.00
Dec.	.....	Salary in full for first term.....	50.00
Dec.	.....	Half year salary.....	475.00
Dec.	.....	Salary on account.....	50.00
Dec.	.....	Fuel appropriation, wood-sawing.....	2.15
Dec.	.....	Books, law library.....	16.25
Dec.	.....	Salary on account.....	100.00
Dec.	.....	Advertising, University.....	42.50
Dec.	.....	Salary on account.....	225.00
Dec.	.....	Civ. Eng., \$7.85; Lat. Ch., \$11; Eng. Ch., \$45; Library \$62.64	126.49
Dec.	.....	Salary on account.....	475.00
Dec.	.....	.....	2.40
Dec.	.....	.....	250.00
Dec.	.....	.....	100.00
Dec.	.....	.....	88.82
Dec.	.....	.....	31.50
Dec.	.....	.....	475.00
Dec.	.....	.....	88.48
Dec.	.....	44.58; Ch. Mathematics, \$18.90.....	21.05
Dec.	.....	\$18.05; Janitor's homeopathic, \$8.....	100.00
Dec.	.....	.....	375.00
Dec.	.....	.....	50.00
Dec.	.....	30'1801 Professor G. Hinrichs.....	
Dec.	.....	30'1902, Harmon Ruppin.....	

## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1878.				
Dec.	30	Prof. S. N. Fellows.	Salary on account	200.00
Dec.	31	Wm. Green.	Salary, one month, \$40, less \$25, for dog killed	15.00
Dec.	31	Prof. L. F. Parker.	Salary on account	140.00
Dec.	31	Miss M. E. Apthorp.	Salary on account	75.00
Dec.	31	Wm. J. Haddock.	Salary on account	75.00
Dec.	31	John N. Coldren	Salary on account	200.00
1879.				
Jan.	2	Baugh Lomb.	Natural Science Chair.	354.22
Jan.	8	Medical Journal.	Medical Department advertisement.	30.00
Jan.	4	W. J. Shoup & Co.	General advertising, University	44.18
Jan.	4	Pres. J. L. Pickard	Salary on account	100.00
Jan.	4	Prof. T. H. McBride.	Salary on account	100.00
Jan.	4	John Schneider.	Fixing chairs vacant fund.	2.25
Jan.	7	W. W. Fairall	.....	7.00
Jan.	7	Florence E. Clark	.....	5.00
Jan.	7	K. E. Backenstos.	Wood sawing, fuel appropriation.	9.75
Jan.	7	Prof. C. A. Eggert.	Salary on account	150.00
Jan.	11	Decosta H. Dodson.	Observation instrument	4.00
Jan.	11	Acres, Blackmar & Co.	La books	23.50
Jan.	11	Michael Devorskey.	W	20.00
Jan.	11		Fixing windows, repair appropriation.	10.18
Jan.	11		Janitor services.	28.00
Jan.	13		Fuel appropriation, wood.	288.00
Jan.	13		Fuel, coal, \$9, incidental \$11.55.	20.55
Jan.	13		Wood, fuel appropriation.	8.70
Jan.	14		Stoves and pipes, incidental	15.83
Jan.	16		Salary on account	150.00
Jan.	17	ms.	Salary on account	200.00

Jan.	17/1830 Bowersock, Prat & Lee	Incidental appropriation	9.20
Jan.	17/1831 John F. Polly	Incidental, teaching	52.64
Jan.	10/1890 Drost & T. Dickard	Salary on account	100.00
Jan.		One stove, incidental	4.00
Jan.		Advertising appropriation	6.00
Jan.		Chair, \$12; Greek Chair, \$5	188.74
Jan.			200.00
Jan.			46.80
Jan.			8.05
Jan.			2.48
Jan.			8.10
Jan.			8.10
Jan.			2.02
Jan.		Wood sawing, fuel appropriation	150.00
Jan.		Salary on account	50.00
Jan.			14.68
Jan.			4.40
Jan.			46.00
Jan.			75.00
Jan.			150.00
Jan.			125.00
Jan.			78.24
Jan.			10.00
Jan.			19.55
Jan.		Advertising generally	80.20
Jan.		Salary on account	100.00
Feb.		Salary on account	100.00
Feb.		Salary on account	100.00
Feb.		Medical janitor	40.00
Feb.		Salary on account	200.00
Feb.		Work, moving coal, incidental	8.25
Feb.		Salary on account	140.00
Feb.		Fuel appropriation	86.00
Feb.		Drawing bonds, incidental	89.75
Feb.		Salary on account	100.00
Feb.		Salary in full	500.00
Feb.		Sharpening instruments	13.80
Feb.		Matches, brooms, etc., incidental	8.65

## EXPENDITURES—CONTINUED.

DATE	Number of Warrants	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1879.				
Feb.	5 1368	Amos N. Currier .....	.....	\$ 75.00
Feb.	5 1369	Prof. L. F. Parker .....	.....	140.00
Feb.	5 1370	Miss M. E. Aphthorp .....	.....	75.00
Feb.	5 1371	Investigator Printing Co. ....	.....	12.50
Feb.	8 1372	Wm. G. Hammond .....	.....	21.80
Feb.	8 1373	George Schlenk .....	.....	4.00
Feb.	8 1374	James Lee .....	.....	81.95
Feb.	8 1375	James Barry .....	.....	10.75
Feb.	8 1376	Wm. Marshall .....	.....	117.00
Feb.	8 1377	H. W. Boerner & Son .....	.....	3.70
Feb.	8 1378	Wm. Louis & Bro. ....	.....	18.00
Feb.	8 1379	John P. Irish .....	.....	4.75
Feb.	11 1380	Mozier & Coast .....	.....	22.13
Feb.	11 1381	D. H. Dodson .....	.....	4.00
Feb.	12 1382	John Allyn .....	.....	18.08
Feb.	12 1383	Harmon Kuppin .....	.....	50.00
Feb.	14 1384	Allin, Wilson & Smith .....	.....	17.30
Feb.	15 1385	John F. Polly .....	.....	52.66
Feb.	15 1386	E. Bixby .....	.....	4.00
Feb.	15 1387	J. L. Pickard .....	.....	15.00
Feb.	15 1388	George Tomlin .....	.....	23.25
Feb.	15 1389	Allin, Wilson & Smith .....	.....	41.62
Feb.	17 1390	Mrs. M. A. Hebbard .....	.....	28.50
Feb.	20 1391	U. S. Express Co. ....	.....	18.50
Feb.	20 1392	Prof. E. F. Clapp .....	.....	475.00
Feb.	22 1393	Pres. J. L. Pickard .....	.....	100.00
Feb.	22 1394	Little, Brown & Co .....	.....	268.25
Feb.	22 1395	Allin, Wilson & Smith .....	.....	20.20
		Law library appropriation, books .....	.....	
		Ink, paper, etc., incidental .....	.....	

Feb.	28	1412	Prof. L. F. Parker	Salary on account	275.00
Feb.	28	1413	Prof. P. H. Philbrick	Anatomical, dissecting material	71.15
Feb.	28	1414	Prof. P. W. Sudlow	Anatomical, dissecting material	70.00
Feb.	28	1415	Prof. Samuel Calvin	Salary in full for year	475.00
Feb.	28	1416	Prof. W. C. Preston	Salary in full for year	475.00
Feb.	28	1417	Miss M. E. Apthorp	Clinical, medicines	26.40
Feb.	28	1418	Chancellor Hammond	Salary for second term in full	125.00
Feb.	28	1419	Prof. W. F. Peck	Salary for second term in full	137.50
Feb.	28	1420	Prof. P. J. Farnsworth	Pay as lecturer, Homeopathic	50.00
Feb.	28	1421	Prof. John C. Shrader	Pay as lecturer, Homeopathic	50.00
Feb.	28	1422	Prof. T. H. McBride	Salary in full for year	687.50
March	1	1423	Will. Hohenschuh	One month's salary	50.00
March	1	1424	William Green	Salary in full for year	475.00
March	1	1425		Salary in full for year	325.00
March	1	1426		Salary in full for year	140.00
March	1	1427	Wm. N. Chalfant	Salary on account	500.00
March	1	1428	O. Startzman	Salary for half year	225.00
March	1	1429	U. S. Express Co.	Salary for half year	225.00
March	5	1430	A. K. Campbell	Salary for half year	125.00
March	5	1431	W. F. Peck	Salary for half year	75.00
March	5	1432	W. F. Peck	Salary for half year	625.00
				Salary in full for year	475.00
				Salary in full for year	475.00
				Salary in full for year	325.00
				Salary on account	100.00
				Fixing 600 chairs	48.00
				Medical janitor	40.00
				Advertising appropriation	42.50
				Salary on account	100.00
				Fixing cistern, incidental	8.60
				Repairing clock	2.00
				Dissecting material, \$7.35; incidental, \$1.30	8.65
				Committee expenses	14.00
				Pay to Med. Ex. Com., Medical committee expenses	119.40
				Same, ordered paid by Board	33.30

## EXPENDITURES—CONTINUED.

DATE.	Number of Warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1879.				\$
March			Homeopathic lecturing, ordered by Board	6.10
March			Hospital Gas	102.80
March			Printing appropriation	15.00
March			Medicines for clinics	45.60
March			Salary of Dr. Pryce	100.00
March			Incidental, medicines	6.08
March			Salary on account	200.00
March			Observatory janitor	4.00
March			Homeopathic appropriation	54.25
March			Additional janitor appropriation	24.25
March			Sums ordered paid by Board	58.05
March			Sums ordered paid by Board	2.50
March			Work on grounds	8.00
March			Medical janitor appropriation	26.66
March			Salary on account	76.00
March			Music in chapel	5.00
March			Wood sawing, fuel appropriation	6.75
March			Salary on account	100.00
March			Advertising Law Department	20.00
March			Incidental teaching	66.80
March			Librarian's salary	150.00
March			Salary on account	145.00
March			Salary on account	145.00
March			Assistant teaching	100.00
March			One month's salary	50.00
March			Work on grounds	5.80
March			Carpenter's work on order of Board	12.50
March			Salary on account	100.00



EXPENDITURES—CONTINUED.

DATE.	Number of warrant.
May	2 1500
May	2 1501
May	5 1502
May	5 1503
May	5 1504
May	7 1505
May	7 1506
May	7 1507
May	8 1508
May	8 1509
May	8 1510
May	9 1511
May	10 1512
May	10 1513
May	12 1514
May	12 1515
May	15 1516
May	16 1517
May	17 1518
May	17 1519
May	17 1520
May	17 1521
May	19 1522
May	24 1523
May	24 1524
May	26 1525
May	28 1526
May	28 1527



May	.....	100.00
May	.....	201.00
May	.....	140.00
May	.....	22.00
May	.....	425.00
May	.....	225.00
May	.....	100.00
May	.....	125.00
May	.....	220.91
May	.....	20.50
May	.....	90.04
May	.....	17.00
May	.....	6.00
June	.....	200.00
June	.....	11.00
June	.....	200.00
June	.....	75.00
June	.....	25.29
June	.....	130.00
June	.....	400.00
June	.....	250.00
June	.....	60.00
June	.....	356.55
June	.....	6.25
June	.....	365.00
June	.....	425.00
June	.....	1.65
June	.....	600.00
June	.....	425.00
June	.....	1100.00
June	.....	425.00
June	.....	425.00
June	.....	700.00
June	.....	425.00
June	.....	510.00
June	.....	610.00
June	.....	425.00
June	.....	300.00

## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1879.				
June	10 1546	Miss Phebe Scofield.....	Salary in full.....	900.00
June	10 1567	Miss M. E. Aphthorp.....	Salary in full.....	225.00
June	10 1568	Chancellor Hammond.....	Salary in full.....	625.00
June	10 1569	Prof. T. H. McBride.....	Salary in full.....	300.00
June	10 1570	Wm. J. Haddock.....	Salary in full.....	250.00
June	10 1571	Harmon Rupp.....	One month's salary.....	50.00
June	10 1572	F. Leyboldt.....	Books, Chair of Civil Engineering.....	18.90
June	11 1573	Decosta H. Dodson.....	Observatory janitor.....	4.00
June	11 1574	A. Rowley & Son.....	Chain pumps, incidental.....	6.30
June	11 1575	Dr. T. S. Parr.....	Expenses to Atlanta, Ga., ordered by Board.....	102.70
June	18 1576	A. K. Campbell.....	Expenses of committee work.....	12.00
June	19 1577	The Light Guard Band.....	Music, commencement expenses.....	120.00
June	19 1578	H. W. Thomas.....	Lecture, commencement expenses.....	75.00
June	19 1579	Prest. J. L. Pickard.....	Traveling expenses.....	32.00
June	20 1580	Samuel Calvin.....	Ex ( bills appropriation.....	11.81
June	20 1581	Decosta H. Dodson.....	Ob.....	1.00
June	21 1582	G. Theil.....	Or.....	50.00
June	21 1583	Wm. Green.....	Gr.....	21.00
June	21 1584	Wm. G. Hammond.....	Co minations.....	49.78
June	21 1585	James Lee.....	Paper, outstanding bills.....	15.25
June	21 1586	John P. Irish.....	Printing programmes, committee expenses.....	27.50
June	21 1587	George Tomlin.....	Janitor work.....	44.50
June	21 1588	John F. Polly.....	Additional teaching.....	52.64
June	21 1589	Wm. N. Chalfant.....	Incidental.....	16.00
June	21 1590	H. W. Beorner & Son.....	Natural Science Chair, \$4.00; outstanding bills, \$1.40.....	6.00
June	23 1591	The Iowa Investigator Company.....	Printing.....	88.50
June	24 1592	Win. Marshall.....	Freight, incidental.....	2.60
June	23 1593	Iowa City Republican.....	Printing.....	24.00



## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	TO WHOM ISSUED.	APPROPRIATIONS.	AMOUNT.
1879.				
August 16 1833		President J. L. Pickard	Traveling expenses	50.00
August 16 1834		William Green	Lawn mowing	16.00
August 16 1835		Mercy Hospital	For clinics, sheets, bandages, etc	33.35
August 16 1836		James Barry	Labor, digging, incidental	6.25
August 16 1837		William N. Chalfant	Carpenter work	31.25
August 20 1838		A. C. Cowperthwaite	Homeopathic, library appropriation	99.91
August 21 1839		John W. Porter	Lumber, incidental	55.35
August 21 1840		Samuel Calvin	Expenses, collecting specimens	150.00
August 21 1841		Journal Printing Company	Printing	11.00
August 23 1842		John D. Parsons	Law book	16.90
August 23 1843		United States Express Company	Carriage, etc., Chair Mathematics	6.75
August 23 1844		James Barry	Lawn mowing, grounds appropriation	7.00
August 23 1845		George Tomlin	Boiler house	28.00
August 23 1846		Thomas Fern		50.00
August 23 1847		William N. Chalfant		32.00
August 26 1848		Thomas Fern		25.00
August 27 1849		Wm. Marshall		847.35
August 30 1850		Dennis Murphy		43.92
August 30 1851		A. C. Cowperthwaite	Hospital	100.00
August 30 1852		James Barry	\$7.00; incidental, \$1.50	8.60
August 30 1853		William		44.00
Sept. 3 1854		Company	Carriage	26.00
Sept. 6 1855		John U.	incidental, \$16.50	29.25
Sept. 6 1856		Wm. N.	lation	46.57
Sept. 6 1857		James Barry		7.00
Sept. 9 1858		Dr. E. F. Clapp	Dissecting	60.00
Sept. 9 1859		W. J. Shoup & Company	Advertising, University	33.00
Sept. 9 1860		J. Duboscy, Paris	Heliostat	108.35

[illegible]



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REPORT OF THE PRESIDENT.

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*To His Excellency, JOHN H. GEAR, Governor of Iowa, and ex-officio  
President of the Board of Regents of the State University.*

I herewith submit to you the Biennial Report of the State University for the period from September 15, 1877, to September 15, 1879.

Very respectfully,

Your obedient servant,

J. L. PICKARD,

*President of the University.*

IOWA CITY, September 15, 1879.



## REPORT.

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FULL information regarding the University in its several departments will be found in the published Catalogue for 1877-8 and 1878-9, copies of which have been sent to all members of the legislature of 1878, and other copies will be sent for distribution to the legislature of 1880.

My own connection with the University covers but half the period under review, and I can speak from personal knowledge only of the latter half of the two years.

In entering upon my work, I found the University in excellent condition, much of which excellence is due to the wise administration of my predecessor, President Slagle.

The embarrassments under which the University had labored during previous years had been fully removed by the generous acts of the legislature of 1878.

The growth of an institution of learning must necessarily be gradual. The process of development is slow, and demanding steady advances by regular steps, the plan of which must be determined long in advance of their actual accomplishment. Dependence upon uncertain appropriations is an effectual bar to such determination. Plans cannot be adopted because of the uncertainty as to means of carrying them forward. Small appropriations which are regular are better than larger appropriations made at irregular intervals. The Permanent Endowment authorized by act of the legislature of 1878 has enabled the Board of Regents to inaugurate a system of improvements in the instructional work of the University, which, in the use of this annual appropriation, will result in great and permanent good. The improvement already entered upon is in the direction of a better equipment of our laboratories, and in the better furnishing of our libraries. The benefit is already manifest, and the value of the annual appropriation

will increase in power as successive years shall add to the accumulations of needed apparatus.

The appropriations for repairs and the permanent endowment placed the institution upon a firmer basis, and furnished the means long needed in some departments of its work.

An able corps of professors and instructors was doing a good work, but necessarily limited from lack of appliances. Instruction, how excellent so ever it may be, is wonderfully increased in efficiency if mechanical appliances be at hand for apt illustrations. The working laboratories of an institution of learning supplement the best instruction that can be given. Such a supplement was sadly needed in some parts of the work of this University. Legislative beneficence has enabled us to supply in some good degree the need which until a year ago had pressed so sorely upon us.

Our library has largely increased in usefulness by a transfer to a better room and by the addition of a commodious and pleasant reading room.

The Laboratory of Physical Science has been enlarged and its apparatus increased so that it is believed to be equal to that of many older institutions of learning.

The Laboratory of Natural Science has received an important addition to its apparatus, and facilities for study have thus been increased.

The fund appropriated for repairs is not yet entirely expended. The buildings were found in bad condition, needing new cornices in some parts, and also needing extensive roof repairs. All wood-work required painting, and upon outside work three coats of paint and one of sand were put, leaving everything in good condition for several years to come.

The greater portion of the walks upon the University grounds have been laid in substantial flagging.

The Central Building has been fitted for steam heating, thus saving our libraries and cabinets from the danger of loss by fire, at the same time affording economical and pleasant heating. All this work has been done under contract, and as cheaply as good work can be done. The boiler house has been constructed upon a plan and in a place just suited to the enlargement of our steam heating by including the other buildings, without further cost than the expense of an additional boiler

and the necessary radiators and connecting pipes. Two boilers will furnish sufficient heat for the three buildings.

The change demanded by the legislature of 1878 in the cutting off the Sub-Freshman Classes of the University was anticipated in part by the action of the Board of Regents in June, 1878, whereby the lower of the two classes was discontinued, and the full requirement of the legislative act was met in June, 1879, by the complete discontinuance of the preparatory work. We had expected that the removal of two hundred students (the number enrolled in the Sub-Freshman Classes at the time of the passage of the act) would give us needed room for our collegiate work, and additional room for the Professional Departments. This expectation has not been realized. The number of students at the time of this writing shows a large gain in the college classes of nearly thirty-three per cent, and in the Professional Department a gain of twenty-seven per cent. More than fifty per cent of our loss in numbers is made up at the opening of the first year of the operation of the act, and should our numbers increase as in the past during the year, seventy-five per cent of the loss will be made up by the close of the year.

We have been compelled to utilize all available space in the buildings.

The money appropriated for the Homœopathic Medical Department has been expended in the erection of a building upon a lot owned by the University. The capacity of the building was determined by the amount of money appropriated, but when erected it appeared sufficient for some years to come. Already it is too small for the use of the Department.

The Lecture and Faculty Rooms, especially the Chemical Lecture Room of the Medical Department, are by no means sufficient for the proper accommodation of the students of that Department, and if the healthy growth of the Department continues as it has done for the two years past, some provision must be made for their better accommodation.

The Law Department has reached the utmost limit of its possible accommodation. It occupies fully all the rooms that can be spared for its use.

The class rooms used by the Collegiate Department are already inadequate, and classes are necessarily divided. This division of classes is

of service in ordinary recitations, but at times the lecture system is fully as effective in the instruction of classes, and then larger rooms would be a saving in the time required of the lecturers. The School of Engineering has not the needed rooms, and yet nothing more can be given the classes now crowded into a small room.

Respectfully submitted,

J. L. PICKARD, *President.*

IOWA CITY, September 30, 1879.

REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
STATE UNIVERSITY,  
LOCATED AT  
IOWA CITY.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





## REPORT.

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TO THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

THE undersigned, your committee appointed to visit the State University, State Historical Society, and Iowa Weather Service, respectfully represent that they met at Iowa City, on Monday evening, Feb. 2d, and on the two following days were engaged in the duties assigned to the committee by the concurrent resolution of the Legislature: examining the various departments and propounding such interrogatories as developed the information required by the General Assembly.

In answer to the first interrogatory of the resolution, your committee would say that in their opinion the funds appropriated by the last General Assembly, have been carefully, wisely and judiciously expended, in proof of which we refer to the Statement of Expenditures made herewith.

In answer to the second interrogatory we deem the expenditures made, within the scope of the act of the General Assembly authorizing the same.

In answer to the third interrogatory, would say that we find that the requirements of chapter 67, acts of the 17th General Assembly, have been fully complied with and that there is a balance in the treasury.

In answer to the fourth interrogatory, would say that your committee found that the funds drawn from the State Treasury had been properly used; and that there had been no misapplication of such funds.

In answer to the fifth interrogatory, we append herewith a schedule showing the names of the President, professors, instructors,

lecturers, officers and employes, with amount of salary paid to each; which is the only compensation paid to them either directly or indirectly by the University, for their services.

## COLLEGIATE DEPARTMENT.

Josiah L. Pickard, LL. D., President.....	\$ 2800 00
Nathan R. Leonard, A. M., Professor of Mathematics and Astronomy, and Dean of the Faculty.....	1700 00
Gustavus Hinrichs, A. M., M. D., Professor of Physical Science..	1700 00
Charles A. Eggert, A. M., Ph. D., Professor of Modern Languages and Literature.....	1700 00
Amos N. Currier, A. M., Professor of Latin Language and Literature.....	1700 00
Stephen N. Fellows, D. D., Professor of Mental and Moral Science and Didactics.....	1700 00
Leonard F. Parker, A. M., Professor of Greek Language and Literature and History.....	1700 00
Philetus H. Philbrick, M. S., C. E., Professor of Civil Engineering	1700 00
Samuel Calvin, A. M., Professor of Natural Science and Curator of Museum.....	1700 00
Phebe W. Sudlow, A. M., Professor of English Language and Literature.....	1700 00
James Chester (First Lieutenant, Brevet Captain, U. S. A.), Professor of Military Science and Tactics.....	
William C. Preston, Assistant Professor in Physical Science.....	1200 00
Thomas H. McBride, Assistant Professor in Natural Science.....	1200 00
Phebe Scofield, Instructor in Mathematics.....	900 00
Mary E. Apthorp, A. M., Instructor for half time in German and Greek.....	450 00
James F. Polley, Instructor in Drawing.....	600 00
Total salaries in Collegiate Department.....	\$ 22450 00

## LAW DEPARTMENT.

William G. Hammond, LL. D., Chancellor.....	\$ 2500 00
Orlando C. Howe, Resident Professor of Law.....	1700 00
James M. Love, LL. D. (U. S. District Judge for Iowa), Professor of Commercial Law and the Law of Persons and Personal Rights.....	1000 00
———, Professor of the Jurisdiction and Practice of Federal Courts.....	
Austin Adams, A. M. (Judge of the Supreme Court of Iowa), Lecturer on the Law of Corporations and Insurance.....	300 00
For Specific Lectureships and for the chair vacant by resignation of Judge Dillon, an appropriation is made of.....	1100 00
Total salaries, Law Department.....	\$ 6600 00

## MEDICAL DEPARTMENT.

William F. Peck, A. M., M. D., Dean and Professor of Surgery and Clinical Surgery.....	\$ 950 00
P. J. Farnsworth, A. M., M. D., Professor of Materia Medica and Diseases of Children.....	950 00
W. S. Robertson, A. M., M. D., Professor of Medicine and Clinical Medicine.....	950 00
J. C. Shrader, M. D., Professor of Obstetrics and Diseases of Women.....	950 00
W. D. Middleton, M. D., Professor of Physiology and Microscopic Anatomy.....	950 00
Elmer F. Clapp, M. D., Professor of Anatomy.....	
Gustavus Hinrichs, A. M., M. D., Professor of Chemistry.....	450 00
E. C. Cook, Lecturer on Medical Jurisprudence.....	100 00
Mark Ranney, M. D. (Superintendent of the Hospital for Insane at Mount Pleasant), Lecturer on Insanity.....	150 00
C. M. Hobby, M. D., Lecturer on Ophthalmology and Otology, Demonstrator of Anatomy and Curator of Medical Museum....	575 00
O. T. Gillette, M. D., Assistant to Professor in Surgery, and Secretary of Faculty.....	
I. P. Wilson, D. D. S., Lecturer on Dental Surgery.....	50 00
Total Salaries, Medical Department.....	\$ 7025 00

## HOMEOPATHIC MEDICAL DEPARTMENT.

A. C. Cowperthwaite, Ph. D., M. D., Dean and Professor of Materia Medica and Diseases of Women and Children.....	\$ 1400 00
W. H. Dickinson, A. M., M. D., Professor of Theory and Practice of Medicine.....	950 00
A. E. Rockey, M. D., Professor of Surgery.....	300 00
For specific lectureships.....	50 00
Total salaries, Homeopathical Medical Department.....	\$2700 00

## OFFICERS AND EMPLOYES.

W. J. Haddock, Secretary.....	\$ 1000 00
John T. Coldren, Treasurer.....	800 00
Mrs. Ada North, Librarian.....	900 00
George Tomlin, Janitor.....	420 00
William Green, Medical Janitor.....	240 00
———, Assistant Janitor.....	222 00
James Berry, fireman, \$6 per week for time of firing (estimated).....	150 00
Total salaries, officers and employes.....	\$ 3732 00
Total salaries fixed for years 1879 and 1880.....	\$ 42507 00

## THE SPECIAL APPROPRIATION OF \$10,000.

The 17th General Assembly appropriated the sum of ten thousand dollars, to be expended as provided in chapter 76, Laws 17th General Assembly. We find the money has been expended as follows, to-wit:

For brick and mason work.....	\$	93	75
For plastering and material.....		295	07
For carpenter work and laborers.....		1090	82
For painting south hall outside.....	\$	267	48
For painting and material, south hall inside.....		187	00
For painting center hall outside.....		264	00
For painting center hall inside and material.....		165	50
For painting chapel outside.....		166	68
For painting—fresco painting inside.....		282	00
For painting hospital outside.....		75	14
		<hr/>	1407 80
For lead, oil and paints.....			818 14
For slate and slating.....		255	73
For tin and tinning.....		561	13
		<hr/>	816 86
For plumbing work.....		95	00
For glass and stained windows.....		73	24
For lumber.....		505	09
For hardware.....		123	11
For tiling.....		24	01
For stone walks.....		1240	26
For boiler and steam heating apparatus, as per contract.....			1890 00
For boiler house, stone work of foundation, smoke-stack foundation, cistern and stone work.....		332	24
For smoke-stack 65 feet high, 7 feet in diameter at base, 5½ feet at top, flue or bore 30 inches.....		300	00
For brick work of steam boiler house and armory.....		247	45
For plastering cistern.....		45	00
For tin roof of boiler house.....		90	00
For plastering room for armory.....		46	00
For painting and glazing.....		54	70
		<hr/>	
Total expenditures.....	\$	9588	54
Amount appropriated.....		10000	00
Balance unexpended.....		411	46

This balance remaining unexpended is estimated to be sufficient to complete further necessary repairs of fences and to finish the stone walks already begun. Your committee find that the moneys

above specified have been well and economically expended; that the work was mainly done by contract to the lowest and best bidder after fully advertising the same, as shown by vouchers and other proof in the secretary's office and by order of the Board of Regents. The repairs made are durable and substantial. The buildings are so improved by the changes and repairs, as to increase their convenience and add largely to their usefulness.

The arrangements made for heating the central building by steam add greatly to the comfort and convenience of the occupants, secure the library and cabinets from loss by fire, and by the removal of stoves from the rooms increase their capacity. The superstructure for boiler-room has been utilized as an armory, in which instruction in military science and tactics is given. Your committee were pleased with the very neat and orderly appearance of the armory and its happy adaptation to the wants of this department.

Since the last report, the Homeopathic Medical Department has been provided with new quarters. The special appropriation made by the Sixteenth General Assembly of \$4,100 has been partly expended in the erection of a building adequate for the present necessities of this department. The building is constructed of brick, and located on ground owned by the State University. The building is a good one, taking into consideration the amount of money appropriated for this purpose.

We desire at this point to notice the overcrowded condition of the law room, chemical lecture-room, and hospital, lecture and operating-room. Your committee recognize the fact that it is impossible, at this time, to appropriate the amount of money necessary to rectify these inconveniences, but suggest that the growing necessities of the State University are such that financial assistance must be granted at some time in the near future, in order that the institution may keep pace with the constantly growing demands made upon it in all of its departments. Especially is the want of convenient rooms noticeable in the medical work of the University; and your committee would recommend that provision be made at as early a date as the finances of the State will admit, for the erection of a building especially adapted to the wants of this department. This change, when made, will afford increased room and

facilities for the other departments, by using the room in the south building now occupied by the medical school. The department of Natural Science has received important additions to its apparatus and appears to be doing excellent work. In this department, as well as that of Civil Engineering, a lack of sufficient room was very noticeable. The library has received valuable additions, is very neatly arranged, and under the care of its present efficient librarian, is an important factor in the work of the University.

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#### STATE HISTORICAL SOCIETY.

In accordance with the concurrent resolution of the General Assembly, your committee visited the room of the State Historical Society, where we found a very large collection of records and articles of great historic value to the State. The earliest published sketches of the Territory and State; publications by Iowa citizens in the various departments of law, literature and science; a large number of catalogues of the various colleges, institutions and societies of the State; historical sketches of counties, giving the history of their early settlement, local government and institutions; duplicate copies of all publications by the State; photographs, engravings and painted portraits of public men and prominent citizens; a large and valuable collection of battle-flags of various Iowa regiments; a large collection of published records of historical societies of other States; also valuable geological and mineralogical collections and bound volumes of many of the leading newspapers and periodicals published within the State. The archives and collections of the Society are very valuable, and should be carefully preserved; otherwise much valuable information concerning the early history and settlement of the State will be irretrievably lost.

We recommend that an appropriation of not less than \$500 annually be made in addition to what is now appropriated, to enable the Society to more vigorously prosecute its work and care for its property. A large number of newspapers and periodicals gratuitously furnished by citizens of the State, are liable to be destroyed for

want of suitable binding. We would recommend that the Society be authorized to send them to the State binder, to be bound at the expense of the State. We would recommend a change in the distribution of the session laws by giving to this Society sixty copies for exchange with other States.

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#### IOWA WEATHER SERVICE.

Your committee beg leave to report that they visited this department of service, also now under the patronage of the State and made so by an act of the Seventeenth General Assembly, when an appropriation of \$1,000 annually for two years was made.

Your committee find here at the central station, as in the other departments we were delegated to visit, a great work going on. We do not consider it within the province of this report to embrace any more than is indicated in the joint resolution. We find the money appropriated for this service has been judiciously used for the purposes for which it was appropriated. The amount of labor performed by the Director astonished your committee. It embraced every variety of observation calculated to be of any, or the remotest, benefit to the service, including, during the past year, a crop report and various other volunteer duties assumed by the Director. For the information of the General Assembly we incorporate a brief statement of the service: There are at present enrolled one hundred and forty-five volunteer observers, whose duties consist in making observations of the state of the weather in their locality. The duties, voluntarily assumed, are to note the condition of the sky and direction of the wind at least three times a day, measure all rainfall, including melted snow, and to observe and report all phenomena. These reports are sent to the central station on the first of every month, made upon blanks provided for this purpose. On reaching the central station they are carefully compared by the Director, who makes a general report. This requires time and patience not readily appreciated by those who will eventually receive the greatest benefit.

The Director, in his first biennial report, makes some general statements, which, if once understood, clearly define the objects to be accomplished by this department. Our State is eminently an agricultural one. A large proportion of her wealth is derived from her soil, and if by investigation and observation a knowledge of the unknown law governing the condition of weather can be obtained, the benefits accruing will be incalculable. We take pleasure in recommending this department to the generous consideration of the State, and also recommend the renewal of the appropriation made by the Seventeenth General Assembly.

In concluding their report, your Committee take great pleasure in testifying to the excellent character and value of the work of the University. Between teachers and pupils there seemed to exist the most cordial relations; and the *morale* and government of the institution appeared to be the result of a law of love rather than of fear, developing self-reliance and true manhood and womanhood as its practical result. Teachers and pupils seemed like one family, in which each sought to maintain the dignity, honor and good name of the household. Who can measure the value of the work of such an institution to the State and to the world? Standing as it does at the head of our educational system, completing the work so grandly begun in our common schools and high schools; giving alike to the children of the State, whether rich or poor, the benefits of thorough education and liberal culture, considerations of justice and of public policy require that it shall continue to receive at the hands of the General Assembly a liberal support.

We desire to make grateful mention of the kindness and courtesy shown us by the President and all others connected with the University, and by the citizens of the place.

The beneficent results of the work of the University are very visible in the air of intelligence and refinement which pervades the social and business life of the people; and we can but congratulate the people of Iowa City on their good fortune in securing the location of such an institution in their midst.

Respectfully submitted,

AARON KIMBALL,  
*On part of the Senate.*  
JACOB K. WAGNER,  
W. S. RUSSELL,  
*On part of the House.*







# SECOND BIENNIAL REPORT

OF THE

# STATE NORMAL SCHOOL,

AT

CEDAR FALLS.

SCHOOL YEARS 1877-78 AND 1878-79.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



CEDAR FALLS, September 1, 1879.

HON. C. W. VON COELLN, *Superintendent of Public Instruction of the State of Iowa:*

SIR:—As required by section 9, of chapter 129, of the laws of the Sixteenth General Assembly, the Board of Directors of the State Normal School at Cedar Falls, herewith transmit their report for the biennial period ending June 26, 1879.

Respectfully submitted,

S. G. SMITH, *President.*

WM. C. BRYANT, *Secretary.*

IOWA STATE NORMAL SCHOOL.

BOARD OF DIRECTORS.

NAME.	POST-OFFICE.	COUNTY.	TERM EXPIRES.
S. G. SMITH, PRES.,	- - Newton,	- - - Jasper,	- - - - 1880.
E. H. THAYER,	- - - - Clinton,	- - - Clinton,	- - - - 1880.
J. J. TOLERTON,	- - - Cedar Falls,	- - Black Hawk,	- - 1882.
G. S. ROBINSON,	- - - Storm Lake,	- - Buena Vista,	- - 1882.
L. D. LEWELLING,	- - Mt. Pleasant,	- Henry,	- - - - 1884.
N. W. BOYES,	- - - - Dubuque,	- - - Dubuque,	- - - - 1884.

BOARD OFFICERS.

W. C. BRYANT, Secretary,	- - - - -	Cedar Falls.
E. TOWNSEND, Treasurer,	- - - - -	Cedar Falls.
WILLIAM PATTEE, Steward,	- - - - -	Clarksville.
Mrs. M. E. PARSONS, Matron,	- - - - -	Waverly.

# FACULTY.

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PRINCIPAL:

**J. C. GILCHRIST, A. M.,**

**PROFESSOR OF MENTAL PHILOSOPHY, MORAL PHILOSOPHY AND DIDACTICS.**

**M. W. BARTLETT, A. M.,**

**PROFESSOR OF MATHEMATICS AND NATURAL SCIENCE.**

**D. S. WRIGHT, A. M.,**

**PROFESSOR OF ENGLISH LANGUAGE AND LITERATURE.**

**MISS S. LAURA ENSIGN, A. M.,**

**TEACHER OF GEOGRAPHY AND HISTORY.**

**W. N. HULL,**

**PROFESSOR OF ELOCUTION, DRAWING AND ACCOUNTS.**

**J. MONROE HOBSON,**

**PROFESSOR OF VOCAL AND INSTRUMENTAL MUSIC.**





## REPORT OF THE BOARD OF DIRECTORS.

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### MINUTES AND TRANSACTIONS OF THE BOARD OF DIRECTORS.

At the meeting of the Board in June, 1878, the following were elected as the faculty :

Prof. J. C. Gilchrist, A. M.,	-	-	-	-	Salary, \$1,500.
Prof. M. W. Bartlett, A. M.,	-	-	-	-	" 1,200.
Prof. D. S. Wright, A. M.,	-	-	-	-	" 900.
Miss S. Laura Ensign, A. M.,	-	-	-	-	" 900.
Prof. W. N. Hull,	-	-	-	-	" 900.

Prof. J. M. Hobron had no salary, but was allowed to charge students customary rates for lessons in Instrumental Music.

At the annual meeting in June, 1879, the same faculty was re-elected, except Prof. Hobron ; and Ida B. McLagan, of St. Louis, was chosen as Teacher of Vocal and Instrumental Music, with direction to assist in teaching English branches as required—the pay for this teacher to be in part from the students in the school receiving special instruction in Instrumental Music.

#### SUGGESTIONS AND OBSERVATIONS.

As the appropriation for this school was by the Act of the Sixteenth General Assembly, you will observe that almost the entire appropriation is required to pay the teachers' salaries. The number of teachers employed has not been as large as in the Normal Schools of other States having a less number of students ; and the appropriation granted has not allowed the payment of salaries usually awarded the same positions in other State Normal Schools.

The representation from different parts of the State is good, considering the age of the school. Sixty-nine counties have sent representa-

tives in two years, and fifty-seven in the past year, with representatives from counties not previously reported in the term now in session, as is more fully shown in the report of the Principal of the school accompanying this report. The members of the Faculty have given their whole mind and heart to the success of this first Normal School in Iowa. The Principal has rendered an elaborate report of the success of those graduating as teachers. He says that some educators in the State look upon the Normal in the same light as upon High Schools and Academies, but that the work from the very first entrance of the student is wholly with the idea of teaching ; and calls attention to the fact that each scholar is pledged to teach two years in the State, and cannot secure the State diploma until evidence is presented to the Secretary of the Board that such student has taught at least two terms in the State.

The members of the Board have each visited the school at other than regular meetings of the Board.

They especially note:

The intense earnestness of all the students.

The little need of discipline.

The extensive representation extending to all parts of the State.

The preponderance of representation from the country districts.

The fine physique and mental vigor of the students.

The large number who teach a part of the time to secure money with which to attend this school.

The school has connected with it a boarding department, accommodating at present one hundred. At the beginning of the present term about fifty applied for board that could not be accommodated in the buildings, but were provided for in the town. This department is in charge of an able steward, who makes it self-supporting. At the June meeting the steward reported a surplus of \$600, from economical management, so that the Board took under advisement the reduction of the price of board and incidentals, and reduced the price of board to \$2.25 per week.

Price for room, heat and lights, per week, in spring and fall

terms..... 40 cts.

Price for winter term, per week..... 60 cts.

For contingent expenses, per week..... 25 cts.

Total cost, spring and fall..... \$2.90

Total cost, winter..... 3.15

The Board have made a purchase of Chemical and Philosophical apparatus of value \$500. We were not able to make a much needed purchase of a library. The buildings have been improved, to suit the needs of this school, to the extent of the appropriation made, augmented by eleven hundred dollars, the saving of the steward. The fences and grounds could, with a small outlay of money, be much improved.

We point to the work and success of this school with the limited appropriations made, as inviting a more generous expenditure by the State, with the confidence of a hundred-fold return to the interests of the public schools, and append an estimate of our ideas of the wants of the school for actual running expenses for the ensuing two years.

#### WANTS AND ESTIMATES.

The amount needed for actual running expenses of the State Normal School for the years 1880-81, is :

For Teachers' Salaries.....	\$15,200
For Repairs and Improvements.....	2,500
For Library and Apparatus.....	1,000
For Contingent Expenses.....	1,500
Total.....	<hr/> \$20,200

There is absolute necessity for increased appropriation, for these reasons :

The school has doubled in size since it was organized, requiring increased teaching force.

Students are now necessarily employed to assist over-worked teachers. Thirty-six classes have recitations each day.

The teachers in the school are now underpaid, and it has been difficult for the Board to obtain competent teachers at the prices they could pay, on account of the limited appropriations.

Nearly twice the teaching force is now required, resulting from classes in advanced grades and increase of number of classes consequent upon increase in number of new students.

Eleven hundred dollars in two years have been used from the Steward's funds paid in by the students, and which should have gone to reduce the expense of the school to students in board and incidentals but has gone to increase the value of the property of the State.

The success of the school seems to the board remarkable, considering the conveniences afforded, contrasted with institutions of like character in the neighboring States.

The efficiency of the school would be greatly increased by the addition of the following:

Room for Library and Reading Room.

Room for Museum and Apparatus.

Room for General Assembly.

Room for Chapel.

More rooms for Recitations.

More room for Dormitories.

The largest room in the building, now used for assembly, seats but one hundred and fifty, while the school now has two hundred pupils. By the addition of a room for a general gathering, the present largest room could be well used for two additional and much needed recitation rooms.

An appropriation for these purposes is a pressing need; and while the board do not at this time present and urge an appropriation for a new building; yet, showing the work that has been done, the increasing growth of and interest in the school, the members have thought the legislature would consider well our wants and necessities, and in due time give us the needed means to erect a suitable building to meet our every want.

We have great faith in the final success, permanent establishment, and resulting good to the State, of this school, and hope that our report, showing our work, will confirm the same in your mind, and that of the General Assembly.

S. G. SMITH, *President of the Board.*

WM. C. BRYANT, *Secretary.*

CEDAR FALLS, September 1, 1879.

*To the Board of Directors of Iowa State Normal School:*

GENTLEMEN :—I respectfully present the Second Biennial Report of Iowa State Normal School for the school years of 1877-78 and 1878-79.

Very Truly,

J. C. GILCHRIST, *Principal.*

*Cedar Falls, Iowa, Nov. 19, 1879.*



# REPORT OF THE PRINCIPAL.

## THE SCHOOL YEAR.

THE school year of forty weeks has three terms. The fall terms began the first week of September, and continued sixteen weeks. The winter terms began the first week of January and continued twelve weeks. The spring terms began the second week of April, and continued twelve weeks.

## ATTENDANCE.

The following table shows the attendance of students by terms and years :

	1877—78.			1878—79.		
	MALES.	FEMALES.	TOTAL.	MALES.	FEMALES.	TOTAL.
Fall Terms.....	50	120	170	45	125	170
Winter Terms.....	46	91	137	49	104	153
Spring Terms.....	49	62	111	47	76	123
The Year.....	84	153	237	82	170	252

The whole number of those who have been in attendance during some portion of the year is shown in the last item.

The following table shows the organization and membership of the several classes :

## SENIOR DIDACTIC CLASS—THIRD YEAR OF COURSE.

	1877—78.			1878—79.		
	MALES.	FEMALES.	TOTAL.	MALES.	FEMALES.	TOTAL.
Graduates .....	3	1	4	1	3	4
Irregular .....				3	1	4

SENIOR ELEMENTARY CLASS—SECOND YEAR OF COURSE.

Graduated .....	5	12	17	9	9	18
Irregular.....	5	16	21	3	11	14

JUNIOR ELEMENTARY CLASS—FIRST YEAR OF COURSE.

Unclassified .....	69	124	193	67	145	212
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	1877-78.	1878-79.
Whole number of students enrolled.....	237	252
The average attendance for whole year.....	139	149
The number who had taught on entering.....	149	160
The number who had not taught on entering.....	88	92
The average number of terms taught on entering.....	4½	4
The average age of the whole attendance.....	20	21
The number of graduates .....	21	22
The average age of the graduates.....	22	23
The whole number in attendance during some portion of the two years.....		411
The whole number in attendance during some portion of the three years of the school's existence.....		486

The number of students who have been in attendance both years, in whole or in part, is 78. This is 19 per cent of the whole number attending. The average number of terms of attendance for each student is nearly two. Many students of extensive experience in teaching have resorted to this school for more thorough preparation.

It seems proper to make a statement of the attendance during the fall term of 1879 up to October 1st :

The number enrolled at this date is.....	198.
The number of new students during this fall term.....	111.
Whole number enrolled since the school existed.....	597.

Fifty-three counties of Iowa were represented in the attendance of 1877-78, and fifty-seven counties in the attendance of 1878-79. The number of counties represented during both years is sixty-nine. They are as follows :

Adair, Adams, Allamakee, Appanoose, Benton, Black Hawk, Boone, Bremer, Buchanan, Butler, Buena Vista, Calhoun, Cedar, Cerro Gordo,



**C**herokee, Chickasaw, Clay, Clayton, Clinton, Crawford, Dallas, Davis, Dickinson, Delaware, Dubuque, Floyd, Franklin, Fayette, Fremont, Greene, Grundy, Guthrie, Hancock, Hardin, Harrison, Henry, Howard, Humboldt, Iowa, Jackson, Jefferson, Jones, Keokuk, Linn, Lyon, Marion, Madison, Mahaska, Marshall, Mitchell, Muscatine, Montgomery, Polk, Pottawattamie, Plymouth, Poweshiek, Ringgold, Shelby, Story, Tama, Union, Van Buren, Webster, Winnebago, Winneshiek, Woodbury, Worth, Wright.

Besides these, two counties of Minnesota, two counties of Illinois, one county of New York and one of Wyoming Territory, sent students—in all, six.

#### STUDENTS' DECLARATION.

Each student receiving free instruction signs a declaration that in becoming a student of Iowa State Normal School, it is his purpose to fit himself for the business of teaching; that it is his intention to teach in Iowa after leaving the school; that he will report to the Principal as often as twice every year for at least two years and once every year thereafter.

It is proper to inquire how well this obligation has been kept. Statistics in my possession show that our students have kept their promise. Of course those who have attended the most terms have been spending their time in study, and have not had the opportunity to teach. There can be no doubt of the fulfillment of their pledge.

#### SPIRIT AND DEPARTMENT OF STUDENTS.

I have very favorable statements to make concerning the deportment and character of our students. During the two years for which this report is made, only two serious cases of discipline occurred. Nor were reproof and admonition frequently needed. In this connection it should be remembered that we have a large household of many students of both sexes. The safety and desirability, indeed, of the co-education of the sexes, receive additional proof from the experience afforded by this school, a school where not only instruction is given in common classes to young men and women, but also where they take their meals at the same table and mingle in the discharge of daily duties as in a family. Careful supervision, of course, is given; but the preponderance of the general sentiment of the school in favor of propriety and decorum arising from the maturity and settled character of

our students, has held in check any latent lawlessness, and been the chief securities against any possible evils.

Our students show great zeal in study, and their industry produces good scholarship in the branches taught. It is the conviction of your faculty that they acquire a love of learning and a devotion to the cause of education, as well as a professional ambition. The students of the school have been its warm friends.

#### THE RESULTS OF THE SCHOOL.

This school is of too recent origin to afford much data from which to estimate the benefits derived therefrom by the public schools. Reports as to the success of our students in the school room are very favorable. Many of them entered upon responsible situations and continue to hold them. But it must not be forgotten that only the few take the shortest of our courses of study, the elementary, and that very many are here only one or two terms. The school is not responsible to any great extent for the quality of work done by this last class, yet it does seem that they are greatly benefited by their short attendance. Here, as in other similar institutions, facts sustain the inference that Normal Schools, by a few terms of instruction, make fair teachers of those who would otherwise be very incapable, and, to students of considerable talent, they give qualifications of discipline and scholarship, and a training, equivalent to many years of unaided experience. To insist that a Normal School is useless because some of its students fail as teachers, is unreasonable in the extreme. It is well known that a considerable number of the graduates of Theological, Medical, and Law Schools, fail in the practice of their profession, but it is well authenticated that a smaller per cent of the graduates of the Normal Schools of our country fail, than of the schools just named.

The usefulness of such professional schools, however, is conceded by all classes. They are a necessity of our civilization.

#### THE COURSE OF STUDY.

The following table presents the course of study and the years and terms:

THE COURSE OF STUDY.

SCHOLASTIC STUDIES.	First Year.			Second Year.			Third Year.			Fourth Year.		
	1st Term.	2d Term.	3d Term.	1st Term.	2d Term.	3d Term.	1st Term.	2d Term.	3d Term.	1st Term.	2d Term.	3d Term.
English Literature.												
English Grammar. ....	1											
Spelling.....	½											
Word Analysis.....	½											
Letter Writing and Composition.....			1									
English Literature.....				1	½							
Rhetoric.....							1					
English Classics....										½		
Historical Elements Eng. Language.....										½		
Mathematics.												
Arithmetic.....	1											
Algebra.....		1	1	1								
Geometry.....						1	1					
Book-Keeping.....			1									
Trigonometry and Surveying.....								1				
Navigation and Spherical Trigonometry.....									1			
Calculus.....											1	
Science.												
Geography ..	1											
Physical Geography.....				1	½							
Physiology .....		1										
Natural Philosophy.....				½			1					
Chemistry .....					½			1				
Botany.....						½			1			
Mental Science.....						½			1			
Zoology.....										1		
Geology.....											1	
Astronomy.....												1
Moral Science.....										1		
Civil Liberty.....											1	
Logic. ....												1
History.												
History of United States.....		1										
Constitution of United States.....			1									
General History..					1	½						
History of England.....								1				
Art.												
Penmanship.....	∞	∞	∞	∞	∞	∞						
Free-Hand Drawing.....	∞	∞	∞	∞	∞	∞						
Reading and Elocution.....	∞	∞	∞	∞	∞	∞						
Vocal Music. ....	∞	∞	∞	∞	∞	∞						
Perspective and Shaded Drawing.....							∞					
Industrial Drawing.....								∞				
Designing .....									∞			
PROFESSIONAL STUDIES.												
Practice—Teaching Classes.....	—	—	—	—	—	—	—	—	—	—	—	—
The Theory of Education.....	L											
School Maunagement. ....		L										
Instruction.....			L									
School Economy.....				1								
How to Teach.....					1							
School Laws of Iowa, {												
General Laws and Decisions, {						1						
Classification of Knowledge, {												
Genesis of Knowledge.....								L				
Educational—Character of, {												
Branches of Study, {									1			
Methods of Advanced Classes.....							L					
History of Education. ....								1				
Philosophy of Education.....										1		
Lives of Great Educators....											1	
Graded Schools.....												1
Institute Work.....										L		

EXPLANATION.—The “1” represents Recitations; the “—,” Drills and Practice. “L” stands for Lectures.

THE ELEMENTARY COURSE consists of First and Second Years.

THE DIDACTIC COURSE consists of the First, Second and Third Years.

THE SCIENTIFIC COURSE consists of the full Four Years.

It will be observed that we have two classes of study, Scholastic and Professional. Both of these fall within the true province of Normal School instruction. The teacher needs fuller and more critical mastery of the branches to be taught than is needed for the ordinary business of life. Thoroughness and fullness of knowledge in these subjects is a preparation for teaching of great importance. The Normal School must give this preparation. Instruction in the Philosophy of Education and Methods of Teaching is the more special province of a Normal School. Fully one-half of the student's time is directly employed in professional study, and the other half, indirectly. In his study and recitation of the branches to be taught, the student gets a knowledge of class management and system, side by side with a knowledge of the subject-matter. He learns the method of teaching that he is to adopt when he comes to have a school of his own. This is especially true for methods of advanced classes. How to teach primary and intermediate grades is taught by lectures and practice.

The faculty have no recommendations to make for a change in the course of study. For the first two years, especially, it is very full. We are maintaining a semi-preparatory year, rendered necessary to accommodate many good students, low in scholarship, perhaps, but of strong minds and reliable character. They often make acceptable teachers after a short attendance, and returning, take a longer course and eventually become able workers in the educational field. In this connection, I may say that our patronage comes largely from the country. Our students are, to a great extent, the sons and daughters of farmers, who highly appreciate the opportunities here afforded.

We experience many difficulties in the management of the Practice Department, arising from the want of room and a suitable Model School. This would be of great value as a school of observation. The present mode of illustrating systems and methods has given such satisfactory results, that it would be continued were a Model School established. However, for the exemplification of full and detail processes a Model School is necessary. We feel this want severely and hope that it will soon be supplied.

## ENTRANCE EXAMINATION.

In order to indicate what qualifications an applicant for admission should have, I subjoin a list of questions used for the Entrance Examinations at the beginning of the year 1877-78:

## GRAMMAR.

1. Define Etymology.
2. Write the plurals of—city, attorney, hero, folio, stratum.
3. Write the possessives of—fox, class, goodness, it, they.
4. Write the principal parts of—have, get, study, throw, overflow.
5. Write a list of ten prepositions.
6. Name the part of speech of each word in the sentence:  
Know then this truth, enough for man to know,  
Virtue alone is happiness below.
7. Analyze or diagram the sentence:  
*Along the cool, sequestered vale of life,*  
*They kept the even tenor of their way.*
8. Parse words in italics.
9. Write a sentence containing a compound adverbial phrase.
10. Correct the sentences: Where did you buy them pencils? Aint my hat perfectly horrid?  
All three of us was present. Which is the oldest, you or me?

## PHYSIOLOGY.

1. Give three points of difference between animal and vegetable life.
2. Name the bones of the trunk.
3. Give three of the uses of the muscles.
4. What is the office of the gastric juice?
5. Describe the heart.
6. What is assimilation?
7. Why is expired air impure?
8. Locate the vocal chords.
9. Name the principal organs of the nervous system.
10. What are commissures?

## U. S. HISTORY.

1. Who was Vasco de Gama? What discovery was made by him?
2. When, where, and by whom were the first settlements made in New York?
3. Name the early settlements made by the Spaniards.
4. Name, in the order in which they occurred, the French and Indian wars, and state the cause of the last.
5. How did the Articles of Confederation differ from our present Constitution?
6. State briefly the important events of Buchanan's administration.
7. What was the Missouri Compromise?
8. State the circumstances of Sherman's march to the sea.
9. State the nature of the provisions of the Fourteenth Amendment.
10. Name three important inventions of the last half century.

## GEOGRAPHY.

1. Name and locate five important cities of the U. S. on or near the Atlantic coast.
2. Name and describe the river systems of South America.
3. What is a border sea? An inland sea?
4. Draw a map of Iowa.
5. In what directions, on what waters, and with what cargo, would a vessel sail from New York to London?
6. Name the States that border on the Mississippi river.
7. Locate the Mediterranean, Red, and Caspian seas.
8. State the principal natural advantages of England.
9. Locate the following cities: Constantinople, Paris, Rio Janeiro, Melbourne, Calcutta.
10. Name the leading occupations of the people of Brazil.

## ORTHOGRAPHY.

Define orthography, syllable, penult, suffix, synonym.

Spell correctly: antelope, bureau, deposit, elephant, fascinate, furrow, ghostly, italicize, license, lieing, murr, oxygen, pedagogue, schooner, syllable, triplicate, zephyr, Humboldt, sychicle, porpus.

## ARITHMETIC.

1. If a number be divided by 2, and four be added, and the sum be multiplied by 3, the product will be 42. Required, the number and the process of finding it.
2. If the sum of three numbers is 726, and two of them are 116 and 325, what is one-third of the other.
3. Reduce two-thirds plus four-fifths to a common denominator, and show why the values of the fractions are not changed thereby.
4. What will 4 tons, 5 cwt., 2 qrs. of hay cost at \$12.50 per ton?
5. Reduce the decimal .00205 to a common fraction in its simplest form.
6. What is the exact time in days from Christmas, this year, to July 4th, 1878, including both days named?
7. The difference in time between two places is 1 hour and 45 minutes; what is the difference in longitude?
8. 250 is ten per cent. of what number?—To be solved by analysis.
9. What is due in three years on a note of \$500, with interest at ten per cent., payable annually, but no payments being made?
10. At what rate per cent. must I invest \$75,000 to give me an income annually of \$6,000?

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CLASS EXAMINATIONS.

There has been much misapprehension of the standards of scholarship which this school is supposed to follow. It has been thought by some that our standards were not high, consequently not a few applicants have experienced some disappointment in being refused admission to our advanced classes. All applicants taking an advanced standing must pass examinations similar to those passed by the classes into which they wish to enter. Graduates from the High Schools of our leading cities present themselves for admission, and it is no disparagement to them or to the schools from which they come to be classified where they can study the common branches. Indeed, generally speaking, it is their earnest wish to be so classified. No student of the six hundred admitted up to this time ever entered the third year of the course, and only a very few of the High School graduates entered the second year of the course. It is in the first and second years that the professional studies receive the greatest attention, especially in the practical part of those studies. No student can afford to omit these subjects. The responsibility for the scholarship of its graduates is by the public attached to the Normal School, and that responsibility cannot be thrown upon the school at which the graduate previously studied.

I subjoin a list of questions actually used in the examination of our classes at sometime during the years for which the report is made. These lists will also show the drift and spirit of our instruction. Creditable as we think the examinations were, we yet aspire to more completeness and thoroughness.

## EXAMINATIONS.

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### FIRST YEAR—ELEMENTARY COURSE.

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#### ARITHMETIC.

1. Two persons have the same income. A saves  $\frac{1}{4}$  of his; B spends \$300 a year more than A, and at the end of two years is \$200 in debt. What is their income?
2. Find the value of  $4\frac{3}{4}$ .
3. How many square feet in the surface of a cube whose volume is 91,125 cubic feet?
4. Derive formula for finding l, a, r, and s, in Geometrical series.
5. Derive formula for finding l, a, d, n, and s, in Arithmetical series.
6. What is the sum of the infinite decreasing series: 4, 2, 1,  $\frac{1}{2}$ , &c.?
7. Find the area of a trapezoid whose parallel sides are 18 and 20 feet, and the perpendicular distance between them is 40 feet?
8. Give formula for finding c, d and a, elements of a circle.
9. Give formula for finding surface and volume of a sphere.
10. Give process of finding volume of a pyramid and frustum of a pyramid.

#### ENGLISH GRAMMAR.

1. Give the principal parts of sit and lie.
2. Define Present-Perfect tense.
3. What is a phrase?
4. What is a participle?
5. Distinguish between a verbal noun and a participle used as a noun.
6. Write a sentence containing a participle used as a noun in the predicate.
7. Write a sentence containing an infinitive used as an adverb.
8. Write a sentence containing a subordinate clause in apposition.
9. Having heard of the fame of the orator, I was anxious to attend his lecture. Parse *having heard*.
10. Parse *to attend*.

#### WORD ANALYSIS.

1. Give origin of the names of the days of the week.
2. Give etymology of the words: kernel, gospel, daisy, and wrong.
3. What is the difference between a Latin and an English primitive?
4. Analyze, define and give sentences illustrating the uses of the words: *transaction*, *auditor*, *precipitate*, and *celebration*.
5. Give and define five derivatives from the Latin primitive, *ciris*.
6. Give and define words containing the prefixes: *preter*, *de*, *dis*, *in* and *ab*.
7. Give and define words containing the suffixes: *ary*, *ous*, *cle*, *age* and *al*.

#### GEOGRAPHY.

1. Give an outline of Geography.
2. e the principal divisions.
3. Define climate, civilization, and government, and its kinds.
4. Describe the drainage of North America.
5. Give the exact position of North America and the United States.
6. Locate the mountains of the New England States.
7. Locate ten college cities in New England.
8. Locate ten sub-divisions of the ocean on the New England coast.
9. Draw a map of Maine.
10. Give a topical outline of Massachusetts.

## PHYSIOLOGY.

1. Classify membrane; picture its structure.
2. Describe and picture the different kinds of epithelium.
3. Describe the ribs, including their attachment to the sternum and spinal column.
4. Name the muscles of the posterior part of the trunk and give function of each.
5. How do the muscles receive nutriment?
6. Give examples of the different kinds of levers found in the body. Indicate the parts of each.
7. Describe the two systems of nerves.
8. Describe blood, and trace its course through the system.
9. What is the office of oxygen in the system and what its products?
10. Name the special senses.

## U. S. HISTORY.

1. Indicate by map or otherwise the parts of the United States discovered by each nation.
2. Define the kinds of colonial governments and give an example of each.
3. Classify the settlement of Connecticut.
4. Give the causes of the French and Indian wars, and the terms of the treaties by which they were terminated.
5. What were the causes of Bacon's and Claybourne's rebellions?
6. Locate Crown Point, Williamsburg, Dartmouth, Louisburg, and Santa Fe.
7. Trace Burgoyne's invasion. Draw a map and locate each place.
8. Name the important battles or sieges of the Revolutionary war, and give the result of each.
9. Classify John Adams' administration.
10. Give an account of the trouble with France.

## ALGEBRA.

1. Define a definition, a theorem, a lemma, a formula, and a demonstration.
2. Simplify  $a - \{ b + [d - e - (f - g)] \}$ .  
Put each half in a parenthesis.  
 $a + x + c^2 - ab + cd - xy$ .
3. Classify Theorem and Factoring. Illustrate each part.
4. Find G. C. D. and L. C. M. of  $x^2 + 8x + 15$ .  
 $x^2 - 2x - 15$  and  $x^2 + 2x - 3$ .  
$$\frac{1}{x + \frac{1}{1 + \frac{x-1}{3-x}}}$$
5. Simplify
6. Divide  $a$  by  $a + x$ .  
Prove that a quantity with a negative exponent is equal to the reciprocal of the same quantity with the sign of exponent changed.
7. Define the different kinds of equations.
8. If from  $\frac{1}{2}$  of my height in inches 72 be subtracted, one-fifth of the remainder will be 2. What is my height?
9. A and B can do a certain work in  $m$  days. A and C can do it in  $n$  days, and B and C can do it in  $p$  days. How long would it take each to do it?
10. Prove proposition III in Indetermination. To what condition can all the cases in Indetermination be reduced?

## CONSTITUTION OF U. S.

1. Say in ten lines what you can about the convention that framed the Constitution.
2. What kinds of powers are exercised by the House of Representatives?
3. How is the number of members determined? What is meant by "members at large"?
4. State the provision for representation as it was for the slave States.
5. In ten lines tell what you can of the processes of electing a President of the U. S.
6. What bills must originate in the House?
7. How is the Senate composed? What are its special prerogatives?
8. Name the powers and duties of the President.
9. Topic: The system of U. S. Courts.
10. How can amendments to the Constitution be made?



## SECOND YEAR—ELEMENTARY COURSE.

### ENGLISH LITERATURE.

1. What influences opposed the development of early American Literature?
2. How do you account for the prominence of Theological writings in our earliest literature?
3. What did Dickens think of the American press?
4. Name ten of the most eminent of American poets and the best works of each.
5. Compare the poetry of Longfellow with that of Whittier.
6. Give a quotation of at least four lines from each of the last-named authors.
7. Name five eminent American novelists.
8. Criticise the style of Bayard Taylor.
9. How do you account for the popularity of Uncle Tom's Cabin?
10. Name four eminent female writers of America.

### ALGEBRA.

1.  $\frac{xyz}{x+y} = a, \frac{xyz}{x+z} = b, \frac{xyz}{y+z} = c.$  Find values of  $x, y$  and  $z$ .
2. When are three quantities in harmonical progression? Find the second term of  $h p$ , the first being  $a$ , and the third  $c$ .
3. Give the formulæ for  $l$  and  $s$  in an Arithmetical Series; also, for  $l$  and  $s$  in a Geometrical Series.
4. Insert four Geometrical means between 10 and 1,000,000.
5. Write formulæ for Pr. and Or.
6. Find sum of  $n$  terms of series:  $1^3, 2^3, 3^3, \&c.$
7. How many permutations may be made of 15 things taken 4 at a time?
8. How many combinations may be made of 10 things taken 5 at a time?
9. How many balls in a square pile of 14 courses?
10. How many balls in a triangular pile of 16 courses, after six courses are removed?

### GEOMETRY (WENTWORTH'S).

1. Define point, line, surface, solid.
2. Tell how they are generated.
3. What is an angle?—Complement of?—Supplement of?
4. Name topics discussed in B. I., and number of Prop's under each.
5. Demonstrate Prop. V, B. I.
6. Demonstrate Prop. XI, B. I.
7. Demonstrate Prop. XXII, B. I.
8. Demonstrate Prop. XXVIII, B. I.
9. Demonstrate Prop. XLVII, B. I.
10. Give formula for value of an angle of equi-angular polygons.

### PHYSICAL GEOGRAPHY.

1. Define magnetic declination and inclination.
2. What are the evidences and results of internal heat?
3. Picture and explain the formation of an artesian well.
4. What is the difference between altitude and relative elevation?
5. Define the classes of relief forms.
6. Define orders of plateaus, and give examples of each.
7. Compare the southern peninsulas of Asia and Europe.
8. Explain the relief structure of Africa.
9. Give the laws of relief.
10. Give an analysis of islands.

### NATURAL PHILOSOPHY.

1. Define weight.
2. What will a pound of tea weigh on the moon? On the sun? At the center of the earth?
3. Define specific gravity.
4. Will the weight of a pail of water be increased if a fish is thrown in?
5. What power may sealing-wax, sulphur and glass acquire, and on what conditions?
6. What two forces are struggling with each other when the hand is withdrawn from water?
7. Suppose we wished to use water instead of mercury for a barometer. How long a tube will be required? Why?
8. Define Inertia.
9. Define heat, sound and light.
10. Picture and describe the action of a lifting pump.

## CHEMISTRY.

1. Define atom, molecule and radical.
2. What is chemism?
3. Write the four laws of combining quantities.
4. Give a list of the elements, their symbols and atomic weights.
5. Give the water type, acid type, basic type, salt type. Give the method of naming the binaries, ternaries. Illustrate.
6. Give the table of non-metallic dyads and metallic monads.
7. What does diatonic mean? What does dyad mean? May some elements be at the same time tetratonic and dyad? Monatonic and dyad?
8. Treat argentric nitrate with chlorohydric acid, what happens? Write the chemical equation. Name the new compound.
9.  $\text{Pb}(\text{NO}_3)_2 + 2\text{HCl} = \text{what?}$  Give the chemical names of the results.
10. Write as many formulæ as you can, and write the chemical name with each.

## BOTANY.

1. Draw leaves, illustrating the kinds and properties, writing names in conjunction.
2. Name the various stems. Illustrate each by naming a plant.
3. Give all the technical terms used in connection with flowers. Define torus, cruci-form, hypogonous, and six others.
4. Define spike, umbel, catkin, corymb, and three other names connected with inflorescence. Illustrate.
5. Discuss ovary.
6. Discuss fruit.
7. Give a classification of the parts of a flower.
8. Give the classification of plants through cohorts.

## GENERAL HISTORY.

1. Classify the Caucasian race and give its principal branches, their places in history.
2. Classify Egyptian caste.
3. What are the principal sources of information in Assyrian and Egyptian history?
4. Draw a map of Palestine; locate Jerusalem, Tyre, Sidon, Balbec and Palmyra.
5. Name the conquests of Cyrus; outline Oriental commerce.
6. Draw a map of Greece. Indicate States. Locate Thebes, Eleusis, Delphi, Marathon, Mt. Olympus.
7. Persian wars—cause? Principal battles and results.
8. Give the periods of Roman history and epochs of the second. Limit each period by date and event.
9. What were the duties of Consul? Tribune? Dictator? Decemvir, and Censor?
10. Give an account of Hannibal.

## SCHOOL GOVERNMENT.

1. What is government? Name and describe the parties concerned in government.
2. Define each of the four departments of government.
3. What are the objects of school government?
4. Give classification of school retributions.
5. Write a few lines on reproof.
6. Discuss means of preventing disorder.
7. Enumerate the objects of punishment.
8. Enumerate the principles relating to the infliction of punishments.

## HOW TO TEACH.

1. Write two or three of your leading thoughts on education and teaching.
2. Name the leading divisions of the first few grades. Give the sub-divisions.
3. In the first steps of reading, what ability should the pupil acquire? Enumerate the successive objects to be effected in a course of teaching reading.
4. What are the faults manifested in pupils of the fifth and two or three succeeding grades?
5. Outline the instruction you have received on how to teach language.
6. Explain how you would teach the reading and writing of decimals.
7. Give the best ways of explaining the division of a fraction by a fraction.

## BOOK-KEEPING.

1. What is Book-keeping?
2. Describe the principal books used.
3. Give an order and form of Day-book entries.
4. Give eight rules for journalizing.
5. Give rule for opening book, first, in individual, second, in partnership business.
6. State five reasons for checking off.
7. What are the objects in view in closing the Ledger?
8. Describe the process of closing.
9. Describe the Balance Sheet.
10. Name several tests of the correctness of the work.

## RHETORIC.

1. Define Rhetoric. Give the aim of the study of it.
2. Speak of subject and theme, and give requisites of the theme.
3. Give classification of invention. Define recollection and selection.
4. What are the organic parts of a discourse?
5. What should the plan of a discourse contain?
6. Speak of the contents of the introduction.
7. Give the general rules for the disposition of the body of a discourse.
8. What is Amplification?
9. State the means of Amplification.
10. Give the classification of disposition.

## THIRD YEAR—DIDACTIC COURSE.

## GEOMETRY.

1. Demonstrate Prop. 3, Book V, Robinson's Geometry.
2. The perpendicular distance between two parallels is 10; what angles must a line of 20 make with these parallels to extend exactly from one to the other?
3. Demonstrate Prop. 9, Book VI.
4. Demonstrate Prop. 18, Book VI.
5. The diameter of a circle is 4; what is the area of the inscribed equilateral triangle?
6. The surface of a sphere is 68 square feet; what is its diameter?
7. Demonstrate Prop. 8, Book VII.
8. Demonstrate Prop. 6, Book VII.
9. Demonstrate Prop. 14, Book VII.
10. Demonstrate Prop. 21, Book VII.

## TRIGONOMETRY.

1. Given the base 432; angle at the base 45 degrees. To find the perpendicular and hypotenuse of a right angled triangle.
2. Given two sides of a triangle, 478 and 567, and included angle 48 degrees. Find remaining parts.
3. What is the area of a rhombus, each side 21 feet, acute angle 53 degrees?
4. Find the length of an arc of 20 degrees in a circle whose diameter is 125 feet.
5. Find area of sector of 20 degrees in a circle whose diameter is 125 feet.
6. Find entire surface of a square pyramid whose slant height is 30 feet, each side of base 4 feet.
7. Find the solidity of a wedge whose base is 30 by 5 feet, altitude 12 feet, length of edge 16 feet.
8. If the diameter of the moon is 2160 miles, find its solid contents.

## NATURAL PHILOSOPHY.

1. Define specific gravity; instruments for finding; how found for all kinds of matter.
2. Write ten lines about water-wheels. Give drawings, if you choose.
3. Describe the experiment of Torricelli. Give Pascal's reasoning.
4. Give the rules for the barometer for predicting changes in the weather.
5. Give some principles governing the intensity or loudness of sound.
6. What is the velocity of sound in still air? Say something of the velocity of sound in other media.
7. Write the absolute number of vibrations for the tones of the musical scale. What is a major third? a minor third?
8. What are the theories of light? What are the sources of light?
9. Define reflection of light, refraction, diffraction, dispersion, chromatic aberration and interference.
10. What is polarization? Write a few lines about it.

## CHEMISTRY.

1. Give the theory of acids, bases and salts.
2. Give the chemism of water; by diagram, show its atomic weight.
3. Have the molecules of all substances equal magnitudes? Whose law is this? State it.
4. Discuss atomicity. Write a table of perissads and artiads.
5. What is catalysis? What is the influence of the nascent state?
6. Give the preparation of oxygen from potassium chlorate. Show the reaction.
7. Discuss the chemistry of the atmosphere. Write fifteen or twenty lines.
8. Discuss the balancing of the chemistry of the atmosphere.
9. Chemistry of a burning candle. Give drawings and explanations.
10. The oxy-hydrogen blow-pipe. Drummond light. Spontaneous combustion.

## BOTANY.

1. State the uses of the pollen and the mode of its action.
2. What is a cell? Size? Make a drawing showing cell growth, and give explanation of the process.
3. Describe the growth of the seed into a plantlet.
4. By drawing, or otherwise, explain wood cells or woody fibre. Explain ducts.
5. Give a drawing showing a cross section of an endogenous stem; also of an exogenous stem. Designate all the parts.
6. Give the sources of the nourishment of the plant. Explain action of the leaves.
7. Circulation. What makes the sap ascend to the leaves?
8. Describe the germination and growth of a Cryptogamous plant, as a fern.

## MENTAL SCIENCE.

1. Topic: Consciousness.
  1. Define.
  2. Distinguish between consciousness and knowledge.
  3. Special conditions of consciousness.
2. Topic: Memory.
  1. Define kinds.
  2. Distinguish between memory and recollection.
  3. Implied conditions.
  4. Conditions for remembering.
  5. Suggestion or Association. Give law of.
  6. Proofs of the deathlessness of memory.
3. Topic: The Presentative Power.
  1. What two-fold elements in perception?
  2. Distinguish between sensation and perception.
  3. Enumerate the senses.
  4. Give their limitations, and show how they supplement one another.

## HISTORY OF ENGLAND.

1. What is known of the pre-historic inhabitants of England?
2. Name and locate the divisions of the Heptarchy.
3. Whom do you consider the greatest of the Saxon kings? Why?
4. How did Kanute reconcile the English to his reign?
5. What were the immediate effects of the Norman conquest?
6. Write a list of the Plantagenet kings.
7. Who was Roger Bacon?
8. Who was the Black Prince? What victories did he gain?
9. What was the mission of Joan of Arc? Speak of her death.
10. Describe the death of Richard III.

## TRUE ORDER OF STUDIES.

1. State the order in which the intellectual powers manifest their activity.
2. What practical conclusions in teaching are derived from this order of activity?
3. Give the divisions of human knowledge, and discuss them.
4. Give the Hierarchy of Science, sub-dividing each.
5. Why is Geometry first? How is it to be taught to children?
6. What is said about a hanging chain?
7. What recommendations are made for teaching chemistry?
8. What is said of the value of history?
9. What parts of the hierarchy appear in Dr. Hill's Curriculum for a Grammar School?
10. What is said on the propriety of Thelstic teaching?

## HISTORY OF EDUCATION.

1. What circumstances go to show that intellectual tastes were developed in ante-diluvian times?
2. Commence with the post-diluvian nations, and name the nations, to the time of Christ, whose educational history we have considered?
3. Trace the education of women through these nations.
4. Name the most prominent features or kinds of education in each nation. Draw a comparison between the education of Sparta and Athens.
5. What is meant by esoteric education? exoteric education? For whom and in what nations was each kind designed?
6. Speak of the education of the Romans? What did Antonius Pius establish? Speak of the Druids.
7. Mohammed, Capella, Bishop Isidore; what the title and contents of his book? Charlemagne, Alcuin, Clement, Alfred the Great.
8. Universities of Italy, Benedictines, The Pandects; by whom and what?
9. Speak of the influence of Rousseau on education.
10. Give an abstract of the views of Pestalozzi on education.

## RULES FOR GRADUATION.

I have deemed it well to insert your rules for graduation. They have been adhered to in our procedure with graduating classes thus far.

I. Students completing the Elementary or Didactic Course of Study, and passing a satisfactory examination, will receive certificates from the faculty and examining board, showing the course of study completed by the student and his proficiency therein, and those graduating in the Scientific Course will receive diplomas, with the degree "Bachelor of Didactics."

A student must be eighteen years of age and have attended this school one year, and must be present during commencement week, before he will be entitled to receive either a certificate or diploma. Before receiving certificate of examination in the Elementary Didactic Course, the applicant must have had at least two terms of successful experience in teaching, and before graduating in the Scientific Course he must have had at least one year of such experience.

Persons of known scholarship and experience in teaching and educational work, are, with the approval of the faculty, after an attendance of at least one term, eligible to the examinations.

II. A Thesis upon some educational subject will be required as a part of the examination.

III. Students completing the studies of the first year and manifesting decided teaching ability, will be granted a certificate to that effect signed by the principal. The applicant must be at least eighteen years of age, must have attended two full terms, and must be present during commencement week.

IV. An examination of candidates for graduation shall be held near the end of each scholastic year. The Examining Board shall consist of the Superintendent of Public Instruction, the President of the

State Teachers' Association, the Principal of the Normal School, and two County Superintendents—one chosen by the Superintendent of Public Instruction, and one by the President of the Board of Directors.

The Superintendent of Public Instruction shall be Chairman, and the Secretary of the Board of Directors, the Secretary of the Examining Board.

V. None shall be admitted to the examinations except the members of the Faculty, Board of Directors and invited guests.

VI. The examinations shall be in writing, in at least two leading branches. The papers of the written examinations shall be preserved in the institution.

VII. When the examination in any subject is concluded, a vote shall be taken as to what candidates shall be accepted in that branch. The result of balloting shall not be announced to the members of the class. A candidate having failed of confirmation in two subjects shall still be eligible to acceptance at the final vote of the examiners, provided for in the next rule.

VIII. When the examinations are completed a vote shall be taken upon each candidate as to his final acceptance, considering his qualifications as a whole.

IX. In this final balloting, four affirmative votes must be received by each candidate in order to warrant his graduation.

X. A record of the proceedings shall be kept in full by the Secretary, and approved by the Chairman of the Board of Examiners.

XI. The result of the examinations shall be announced to the class by the President of the Board of Directors.

XII. The diplomas shall be signed by the President and Secretary of the Board of Directors, the Principal, and the Superintendent of Public Instruction.

The committee that examined the candidates for graduation of the class of '77 were Hon. Carl W. von Coelln, Superintendent of Public Instruction, Des Moines; Prof. Wm. D. Collins, Superintendent of Chickasaw county; Prof. J. Macy, Iowa College, Grinnell; Miss S. Blackburn, Superintendent of Benton county.

The committee that examined the candidates for graduation of the class of '78, were Prof. W. J. Shoup, President of the Iowa State Teachers' Association; Rev. Charles Gibbs, Pastor of Congregational church, Cedar Falls; Ira C. Kling, Deputy Superintendent of Public Instruction; and M. H. Kling, Superintendent of Cerro Gordo county.

The examinations were comprehensive and thorough, and occupied two days and evenings.

#### WANTS.

When the State of Iowa established this school, there were transferred for your uses the grounds and buildings owned by the State and occupied as a Soldiers' Orphans' home. It was then known that these buildings were inadequate to the requirements of such a school as you and the people of the State hoped to see established. All that could be done with the facilities and money at your command has been done. The accommodations and equipments, barely sufficient for a beginning, have been far outrun by the growth of the school. If it is the intention to keep pace with the demands of the public patronage upon the school, there exists great necessity for more room. I shall not enumerate the many pressing wants; but with many friends I express the sincere hope that the State will respond to these demands and furnish adequate facilities to meet them.

#### MISCELLANEOUS.

The Philomathic Literary Society is maintained by the young men of the school, and the Altha Literary Society by the young ladies. They are excellent auxiliaries, and their effects upon the culture of the school are apparent. These societies sustain a paper called THE STUDENTS' OFFERING, which has ranked with the best in college journalism.

Full and reliable records are kept at no little cost of labor, showing for each student his time of entrance, duration of attendance, scholarship, deportment, etc.

An Alumni Association has been formed, and its first meeting will be held next June, during commencement week.

I desire to express my thanks for the excellent faculty that you have chosen to be my co-laborers, and to say that they are able and faithful teachers. Their labor is greater than is customary—greater than it should be. A school of this size requires more teaching force than you have employed, although you have gone to the extent of the means at your command.

## CONCLUSION.

The prospects of the school are very favorable. The attendance will greatly increase during the next year or two, if suitable facilities can be supplied. This increase in attendance will undoubtedly be appreciated by all friends of our educational system.

To conclude, we are confident that in making up an opinion as to the success of this school, there should be taken into account its recent establishment, the number of students attending, the distribution of that attendance through all parts of the State, the age of students, the length of time that they attend, the number of graduates, the results of the tests at examinations, the good work done by the great majority as teachers, and the strong educational influence exerted. It seems impossible that any other than a favorable opinion can be formed. It is hoped that these results will vindicate the wisdom of the experiment which Iowa has at last made, and induce her to increase the facilities to a degree commensurate with the importance of the enterprise.

J. C. GILCHRIST, *Principal.*

*Cedar Falls, November 1, 1879.*







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# EXHIBIT.

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SECRETARY'S AND TREASURER'S REPORTS FOR THE  
BIENNIAL PERIOD COMMENCING JULY 27, 1877,  
AND ENDING JULY 9, 1879.

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## EXPENDITURES.

*The following exhibit shows the expenditures of the State Normal School from July 27, 1877, to July 9, 1879, being a list of the warrants drawn on the treasurer of the institution for that period:*

DATE.	Number of warrant.	FOR WHAT PURPOSE ISSUED.	AMOUNT.
1877.			
Sept.	8	104 Teacher .....	200.00
Sept.	8	103 Teacher .....	80.00
Sept.	8	109 Teacher .....	60.00
Sept.	13	110 Repairs.....	500.00
Sept.	18	105 Teacher .....	150.00
Sept.	18	108 Teacher .....	80.00
Sept.	18	107 Teacher .....	40.00
Sept.	28	112 Secretary .....	100.00
Sept.	29	113 Teacher .....	120.00
Sept.	29	111 Printing.....	110.72
Dec.	4	118 Teacher .....	120.00
Dec.	4	119 Teacher .....	120.00
Dec.	4	115 Teacher .....	80.00
Dec.	4	114 Teacher .....	150.00
Dec.	4	117 Teacher .....	150.00
Dec.	6	120 Teacher .....	150.00
Dec.	7	116 Teacher .....	160.00
Dec.	8	121 Teacher .....	80.00
Dec.	8	122 Teacher .....	180.00
Dec.	17	123 Teacher .....	150.00
Dec.	20	124 Teacher .....	120.00
1878.			
March	7	125 Teacher .....	150.00
March	7	126 Teacher .....	240.00
March	7	127 Teacher ...	150.00
March	7	128 Teacher .....	80.00
March	7	129 Teacher .....	160.00
March	7	130 Teacher .....	160.00
March	7	131 Teacher .....	80.00
March	8	132 Secretary's salary (balance).....	50.00
March	12	125 Teacher .....	80.00
March	19	133 Teacher .....	120.00
April	1	134 Teacher .....	150.00
June	7	135 Teacher .....	150.00
June	7	136 Teacher .....	160.00
June	7	137 Teacher .....	80.00
June	7	138 Teacher .....	240.00
June	7	139 Teacher .....	150.00
June	8	140 Teacher .....	240.00
June	26	141 Diplomas.....	50.00
June	26	142 Diplomas.....	150.00
June	27	143 Expense.....	12.00
June	28	144 Teacher .....	120.00
July	1	147 Teacher .....	80.00
July	1	146 Teacher .....	80.00
July	5	145 Contingent (sundries).....	8.00
July	6	148 Printing.....	7.50
July	6	149 Charts.....	15.75

## EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	FOR WHAT PURPOSE ISSUED.	AMOUNT.
1878.			
Aug. 12	150	Sundries .....	\$ 31.00
Aug. 17	151	Repairs .....	111.00
Aug. 19	152	Postage .....	14.08
Aug. 21	154	Stone .....	59.23
Aug. 22	153	Printing .....	127.00
Aug. 23	155	Work and freight .....	28.35
Aug. 30	156	Repairs .....	56.37
Sept. 4	157	Threshing .....	14.50
Sept. 4	158	Freight .....	18.64
Sept. 4	159	Threshing .....	9.00
Sept. 6	160	Repairs .....	33.88
Sept. 10	161	Repairs .....	18.00
Sept. 10	162	Employes .....	155.60
Sept. 14	163	Supplies, etc. ....	3.34
Sept. 14	165	Butter .....	21.41
Sept. 14	164	Groceries .....	63.33
Sept. 16	166	Repairs ....	190.88
Sept. 16	168	Repairs and supplies .....	246.99
Sept. 17	168	Repairs .....	21.50
Sept. 20	169	Repairs .....	139.25
Sept. 21	170	Teacher .....	120.00
Sept. 27	172	Teacher .....	90.00
Sept. 28	171	Teacher .....	90.00
Sept. 28	173	Teacher .....	150.00
Sept. 28	167	Repairs .....	5.00
Sept. 30	...	Repairs .....	70.00
Oct. 10	175	Books .....	5.00
Oct. 12	177	Furniture .....	45.25
Oct. 12	178	Apparatus ....	350.00
Oct. 12	179	Groceries, etc. ....	141.50
Oct. 17	176	Supplies .....	72.92
Oct. 25	180	Meat .....	103.23
Nov. 7	181	Teacher .....	90.00
Nov. 7	183	Teacher .....	90.00
Nov. 7	184	Teacher .....	120.90
Nov. 7	185	Teacher .....	150.00
Nov. 8	182	Teacher .....	70.00
Nov. 23	187	Teacher .....	70.00
Nov. 23	188	Teacher .....	120.00
Nov. 23	189	Teacher .....	90.00
Nov. 23	190	Teacher .....	90.00
Nov. 23	186	Wood .....	96.85
Nov. 30	191	Teacher .....	150.00
Dec. 14	193	Teacher .....	90.00
Dec. 14	192	Hardware .....	161.64
Dec. 18	194	Supplies .....	103.23
Dec. 21	195	Teacher .....	70.00
Dec. 21	197	Teacher .....	120.00
1879.			
Jan. 21	196	Teacher .....	90.00
Jan. 21	198	Teacher .....	150.00
Jan. 21	200	Printing .....	41.85
Jan. 21	201	Printing .....	55.00
Jan. 25	203	Teacher .....	150.00

EXPENDITURES—CONTINUED.

DATE.	Number of warrant.	FOR WHAT PURPOSE ISSUED.	AMOUNT.
1879.			
Jan. 25	202	Apparatus.....	\$ 145.65
Feb. 1	205	Teacher .....	90.00
Feb. 1	206	Teacher .....	90.00
Feb. 1	199	Coal and sundries.....	708.44
Feb. 1	204	Teacher .....	120.00
Feb. 1	207	Teacher .....	70.00
March 1	209	Teacher .....	90.00
March 1	208	Teacher .....	70.00
March 1	210	Teacher .....	90.00
March 1	211	Teacher ..	120.00
March 3	212	Teacher .....	150.00
March 22	213	Teacher .....	100.00
March 28	214	Teacher .....	70.00
April 3	216	Teacher .....	90.00
April 3	215	Teacher .....	120.00
April 3	217	Teaching .....	150.00
May 3	218	Teaching .....	70.00
May 3	219	Teaching .....	90.00
May 3	220	Teaching .....	120.00
May 3	221	Teaching .....	90.00
May 7	222	Teaching .....	150.00
May 31	223	Teaching .....	75.00
May 31	224	Teaching .....	120.00
May 31	225	Teaching .....	90.00
May 31	227	Teaching .....	75.00
June 14	228	Teaching .....	70.00
June 19	226	Teaching .....	90.00
June 20	229	Teaching .....	80.00
June 20	230	Teaching .....	150.00
June 20	231	Teaching .....	70.00
June 20	232	Teaching .....	90.00
June 20	233	Teaching .....	120.00
June 27	....	Expenses oration .....	10.00
July 1	235	Advertising in Normal Monthly.....	42.25
July 1	236	Copies of Offering .....	27.00
July 7	237	Stamps .....	2.00
July 9	238	Pictures .....	10.00
		Total .....	\$ 14,453.93

WM. C. BRYANT, *Secretary.*

CEDAR FALLS, Iowa, Sept. 1, 1879.

## TREASURER'S REPORT.

*For the term beginning July 27, 1877, and ending July 9, 1879.*

## CONSOLIDATED FUND.

## RECEIPTS.

Balance on hand in teachers' fund at last report.....		\$ 578.22
Balance overdrawn in contingent fund at last report....		390.94
Balance overdrawn in improvement fund at last report..		.01
Net cash balance in treasury at date of last published report.....		\$ 187.27
1877.		
Sept.	4.	By State warrant.....\$ 1,437.50
Dec.	3.	By State warrant.....1,437.50
1878.		
March	6.	By State warrant.....1,437.50
June	6.	By State warrant.....1,437.50
July	6.	By Wm. Pattee, Steward .....500.00
Aug.	31.	By hogs sold .....26.52
Sept.	6.	By money advanced by me on State warrant.....1,000.00
Sept.	9.	By Wm. Pattee, Steward .....400.00
Sept.	14.	By Wm. Pattee, Steward .....710.00
Nov.	7.	By State warrant.....1,687.50
1879.		
Jan.	20.	By State warrant.....1,687.50
Feb.	5.	By balance of State warrant which I advanced.....689.88
April	5.	By State warrant.....1,687.50
June	19.	By Wm. Pattee, Steward .....300.00
Total moneys received since date of published report, July 27, 1877, to July 9, 1879.....		\$ 14,626.17

## DISBURSEMENTS.

Total amount paid on orders since date of last published report, July 27, 1877, to July 9, 1879.....		\$ 14,153.93
Balance in treasury, July 9, 1879.....		172.24
Total.....		\$ 14,626.17

E. TOWNSEND, *Treasurer.*

*Cedar Falls, Iowa, Sept. 1, 1879.*







**REPORT**  
**OF THE**  
**JOINT COMMITTEE**  
**OF THE**  
**EIGHTEENTH GENERAL ASSEMBLY**  
**OF THE**  
**STATE OF IOWA,**  
**APPOINTED TO VISIT THE**  
**STATE NORMAL SCHOOL,**  
**LOCATED AT**  
**CEDAR FALLS.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**



## REPORT.

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TO THE PRESIDENT OF THE SENATE AND SPEAKER OF THE HOUSE OF REPRESENTATIVES OF THE GENERAL ASSEMBLY:

YOUR Joint Committee appointed to visit the State Normal School, at Cedar Falls, have performed that duty and beg leave to report as follows:

We were very cordially received by Prof. J. C. Gilchrist, the Principal, and Col. Wm. Pattee, the Steward, and shown over the building and grounds, and given free access to all the books of accounts and departments of the institution. We made a thorough examination of both the educational and boarding departments, and found everything in a very gratifying condition. We most heartily commend the Trustees and Steward for their very economical management of the finances of the institution and have no hesitancy in saying that in our judgment the appropriations made to this school by the last General Assembly have been wisely and economically expended, and that so far as we can learn they have not been diverted from the objects for which the appropriations were made.

We would also report that we find it is the practice, in the management of the institution, to contract no indebtedness, other than for contingent expenses, and that all of such debts are fully paid every thirty days; and that chapter 67 of the acts of the Seventeenth General Assembly have been carefully complied with.

We give herewith names of each teacher employed and amount of salary paid.

NAME.	SERVICE.	SALARY FOR YE'R.
J. C. Gilchrist.....	Principal .....	\$ 1500 00
M. W. Bartlett.....	Teacher .....	1200 00
W. N. Hull .....	Teacher .....	950 00
D. S. Wright.....	Teacher .....	900 00
Miss S. L. Ensign .....	Teacher .....	750 00
Miss Ida B. McLagan .....	Teacher .....	500 00

J. C. Gilchrist boards in the institution and pays board for himself and family.

D. S. Wright boards in the institution and pays board.

Miss S. L. Ensign boards in the institution and pays board.

Miss Ida B. McLagan receives her board in addition to her salary.

M. W. Bartlett and W. N. Hull board outside of the institution, receiving their dinner in the institution when engaged in school work, for which no charge is made.

We give below names of all other employes of the institution, kind of service performed and the price paid each per month:

NAME.	SERVICE PERFORMED.	SALARY PER MONTH.
Wm. Pattee.....	Steward.....	\$ 50 00 and board.
A. Martz.....	Engineer.....	40 00 and board.
E. H. Brown.....	Teamster.....	20 00 and board.
Hattie Wright.....	Cook.....	15 00 and board.
Anna Callenback.....	Cook.....	12 00 and board.
Mary Callenback.....	Cook.....	10 00 and board.
Nettie Brown.....	Laundry.....	12 00 and board.
Nellie Brown.....	Laundry.....	12 00 and board.
Ada Clark.....	Laundry.....	12 00 and board.
Ella Deitrick.....	Dining-room.....	8 00 and board.
Libbie Deitrick.....	Dining-room.....	8 00 and board.
Lizzie Vance.....	Dining-room.....	8 00 and board.
Libbie Callenback.....	Dining-room.....	8 00 and board.
Maude Harr.....	Dining-room.....	8 00 and board.
Carrie Wisebord.....	Dining-room.....	8 00 and board.
Libbie Vance.....	Halls.....	12 00 and board.

The number of students now in attendance is one hundred and ninety-five; the number enrolled during the current year, two hundred and fifty-two.

The course of study embraces the branches taught in both the common and higher schools.

It is the opinion of the committee that the school has a very capable and careful board of directors, and a most efficient faculty, and that they together have worked with a commendable zeal for the success of this, the first State Normal School, and that it has been their aim to secure for the State the largest possible results for the appropriations thus far made and placed at their disposal. They have enforced the most rigid economy in all the details of management, and have given a great deal of attention to the course of study. Your committee would, however, suggest the propriety, for the present, at least, of drop-

ping from the course of study the fourth year, as we consider it is of doubtful propriety to sustain a Normal School, at the expense of the State, for the purpose of instructing pupils in those higher branches, such as trigonometry, astronomy, surveying, navigation, spherical trigonometry, and calculus.

The work of the Normal School, in the opinion of the committee, is to prepare teachers for their work, and not to furnish them with a higher education.

With the exception of Greek and Latin the course of study here is about the same as that of the most of our colleges. This objection becomes more forcible when it is remembered that this school is supported by a tax on all the counties of the State, and that there are forty-two (42) counties that have no representatives, and a large proportion of the others have but one or two. At present there are but four pupils in this class, and the number will always be small. It costs as much to provide teaching force for a senior class of four as it does for a first year class of seventy-five. To provide the teaching force for the present advanced class during their last year will cost the State two hundred and fifty dollars per student.

Beyond this we have no recommendation to make as to the course of study adopted. The teachers are all doing excellent work. They are preparing teachers in the subject matter as well as in the best way of imparting that instruction to others. They are turning out a large number of excellent teachers. We most heartily commend the work done, and would recommend the increase of facilities as fast as the revenue of the State will permit.

Your committee have carefully considered the wants of the school for the next biennial period, and would recommend that the following appropriations be made:

For teachers' salaries .....	\$ 18700 00
For repairs and improvements .....	1500 00
For library and apparatus ....	1000 00
For contingent expenses.....	1500 00
	<hr/>
	\$ 17700 00

It will be noticed that these amounts are less than the amounts estimated by the Board of Directors.

We would be in favor of allowing all that they ask and believe the money would be judiciously expended, but it seems to your committee,

in consideration of the unusually large demands upon the State at this time, that the amount we recommend is all that should be appropriated for the purposes named.

Your committee would call attention to some of the needs of the school, as set forth on page ten (10) of the Directors' Biennial Report, and would recommend that there be an appropriation made of twenty-thousand dollars (\$20,000) for the erection of a building to supply the much needed room, and would in addition to the reasons given by the Board, state that it costs the State about three millions of dollars annually to pay the salaries of the teachers employed in the public schools. Much of this is almost as bad as squandered through the inefficiency of the teachers. It is thought by many that of the twenty-one thousand teachers in this State, not more than one-half are even moderately well prepared for their work. If one-fifth of the money now expended in paying teachers was expended in preparing them for their work, the efficiency of our school system would be greatly enhanced. We think that it is no more than simple justice to those who pay this three million of dollars annually into the teachers' fund, that the State should, so far as possible by legislation, secure for our children a more efficient class of teachers, and we know of no way by which this result can be so cheaply accomplished as by fostering this school, and at no distant day establishing at least three other similar schools in different parts of the State.

The size and character of the present building, the amount of land owned by the State at this place, and amount of land under cultivation, has been fully shown by former reports to the General Assembly.

As the present building does not provide accommodations for all the pupils in attendance, and it probably will never be the best policy for the State to furnish boarding facilities for all those who may wish to attend this school, and as the building is situated one and one-half miles from the town of Cedar Falls, we would suggest that the Board of Directors be authorized to lease a portion of the land to parties who may be desirous of erecting houses for the accommodation of teachers and their families, or for boarding houses, or buildings having rooms to rent to students who may be desirous of boarding themselves.

Your committee would also recommend that any teacher having passed the regular examination in the course of study, and received a diploma, that said diploma shall give said teacher all the privileges and advan-



**tages** of a first class certificate issued by a county superintendent of schools.

A. W. FORD,  
*Com. on part of the Senate.*

S. F. PROUTY,  
MICHAEL EHL,  
*Com. on part of the House.*



EIGHTH BIENNIAL REPORT  
OF THE  
BOARD OF TRUSTEES  
OF THE  
IOWA STATE AGRICULTURAL COLLEGE  
AND FARM,  
MADE TO  
THE GOVERNOR OF IOWA,  
FOR THE YEARS 1879 AND 1880.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY]

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



STATE AGRICULTURAL COLLEGE, }  
AMES, Iowa, December 1, 1879. }

TO HIS EXCELLENCY, JOHN H. GEAR:

IN accordance with the statute defining the duties of the Secretary of the Board of Trustees of the Iowa State Agricultural College and Farm, I have the honor to transmit herewith the Eighth Biennial Report of said Board. .

E. W. STANTON, *Secretary.*



# REPORT OF THE BOARD OF TRUSTEES.

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*To the General Assembly of the State of Iowa:*

As members of the Board of Trustees of the Iowa Agricultural College, we beg leave to report the continued growth and prosperity of that institution. During the last two years it has, in our opinion, made marked progress in the line of work for which it was established, and is each year fulfilling more and more completely the purpose prescribed by the Congressional grant from which it derives its endowment. We deem it the duty of the State to encourage its further development. To render such development possible, it is absolutely necessary that the Legislature provide additional buildings; without them the institution cannot grow beyond its present capacity. The State is bound under its contract with the National Government to meet this pressing want, for, in accepting the land grant from Congress, the State pledged itself to furnish all needed buildings. We, therefore, earnestly ask the Legislature to fulfill this contract of the State with Congress, by making appropriations for the following indispensable improvements:

- First*—For a building to be used as an experimental kitchen and for recitation rooms.....\$ 5,000.00
- Second*—For a building to be occupied by the Veterinary School, Botanical Department, and School of Agriculture..... 5,000.00
- Third*—For a small building to be used as a feeding barn by the Professor of Experimental Farming..... 1,300.00
- Fourth*—For swine-houses, corn-cribs and poultry-houses..... 1,200.00
- Fifth*—For four boarding cottages, to meet the demand for additional room ..... 6,000.00
- Sixth*—For vault and fire-proof safe..... 1,500.00

The Board respectfully urge that the pressing need of the above improvements will be manifest from the following facts, and they refer

for full details to the report of the President of the College, which they heartily indorse. The Department of Domestic Economy is wholly destitute of suitable rooms for instruction in cookery, laundry work, etc. The Department of Botany and Veterinary Science are at present temporarily located in the house formerly occupied by the President of the College. This house does not furnish suitable quarters for these departments, and is needed for occupancy by officers of the institution. The two feeding-houses are indispensable to the successful conducting of experiments for which the Board have now provided an able Professor, whose salary is to be paid from the funds of the College. The farm is lacking, and has always lacked, a poultry-house and adequate corn-cribs. It is important that the College should be provided with some safe depository for its funds and valuable books and papers.

In addition to appropriations for these much needed improvements, we are compelled to ask for a small sum to cover expenses concerning the necessity of which there can, we think, be no question upon the part of your honorable body.

For meeting the expenses connected with the handling of College lands, and for making repairs upon College buildings, we earnestly recommend an annual appropriation of \$1,500. The College has no funds from which it can pay these necessary expenses. In section three of the act of Congress under which the State received the grant of public lands which constitutes the endowment of the College, it is expressly stipulated that all the expenses of management and superintendence of said lands, and all the expenses incurred in the management and disbursement of the moneys received therefrom shall be paid by the State out of the treasury of the State. It is also, in section five of the same act, stipulated that "no portion of said fund, nor the interest thereon, shall be applied either directly or indirectly under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings." Thus it will be seen that the College is prohibited from using any of its funds for the purposes mentioned. In 1868 the Board of Trustees invested the surplus interest-money then on hand and not needed for the support of the College, in lands known upon the books of the College as Sioux City lands. The money received from the lease of these lands has been used by former Boards, under the plea of urgent necessity, as a contingent fund, from which has been paid all the expenses connected with the management of the lands not borne by the lessees, and also the ordinary repairs of College



buildings. Such use of this fund has been regularly reported to the Legislature and received its tacit approval. It is, however, an evident misapplication of the funds of the institution. The expense of managing the lands must be borne by the State. So says the contract with the National Government to which the State is a party.

The Interest Fund cannot be used for repairs, neither can it be loaned and the interest thus received be applied for that purpose, for the law expressly declares that the Interest Fund shall not be used either *directly* or *indirectly* for the purchase, erection, preservation or repair of any building.

The question of the right of the College to use the interest arising from the loaning of accumulated interest money for the purposes mentioned above, was submitted by this Board to the Attorney-General, and he decided, in an opinion presented at their meeting in May, 1879, that such use of said fund would be illegal. Senator Kirkwood, a former member of the Board of Trustees, held the same opinion, and so reported to the Legislature in the Sixth Biennial Report of this College. Believing, as we do, that to apply any of the funds under our charge to the purposes mentioned would be an illegal use of such funds and a plain violation of our official oaths, we have no other recourse than to ask the Legislature to appropriate a sufficient sum to meet these *absolutely necessary* expenses.

#### AMENDMENT SUGGESTED TO SECTION 1617 OF CODE.

Section 1617 of the Code requires that all moneys arising from the sale of Endowment Fund land shall be paid into the State Treasury and shall be invested by the State Treasurer, subject to the approval of the Executive Council, in stocks of the United States, or some other safe stocks, yielding not less than five per centum on the par value of the stocks, and that the money arising from the interest on said stocks shall be paid over to the Board of Trustees. It will be seen that the section does not provide that the treasurer shall make report of such investments, or the interest received therefrom, to the Board of Trustees. We deem such report necessary in order that the Board may have such knowledge of the nature and amount of its resources and income as to enable it intelligently to make the annual appropriations for defraying the expenses of the different departments. At present this portion of the funds of the institution is managed by an officer who is not required to render any account of such management to this

Board. We have, therefore, no direct means provided by law for ascertaining the amount invested, the probable income to be expected from that source, or whether the amounts paid over to the Board are the correct amounts due from the interest collected on said fund.

We respectfully suggest that the section be so amended as to make it the duty of the State Treasurer to render to this Board quarterly reports of the condition of the College funds in his charge, specifying in said report any changes in the investment of the original fund during the quarter, and giving in detail the interest received from investments made. We further recommend that the time of making these reports be so fixed that one of them shall cover the quarter ending with the second Wednesday of November, the close of the fiscal year of the College.

For detailed statement of the work done and progress made in the different departments of the College, we refer you to the accompanying report of the President and Faculty.

J. N. DIXON.

H. G. LITTLE.

GEO. H. WRIGHT.

BUEL SHERMAN.

WM. MCCLINTOCK.

## REPORT OF THE PRESIDENT.

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*To the Honorable Board of Trustees of the Iowa Agricultural College:*

*Gentlemen*—IN obedience to the statute which defines the duties of the President, I submit for your consideration my Eighth Biennial Report.

The Iowa Agricultural College has completed its eleventh year since the formal opening in March, 1869. From its dedication, at that date, to the cause of industrial learning, to the close of its last commencement, it has been striving steadily and successfully to accomplish the purpose set forth in the national law, which at once constitutes its charter and supplies its endowment. Whoever studies its brief history will not fail to find therein all the indications of a uniform and healthy advancement—an advancement which was never for a moment checked by the bitter hostility encountered in its earlier years.

But the advantages under which the Iowa Agricultural College has attained, in so short a period, a prosperity reached by no other similar institution in the land, may be embodied in a few explicit statements

1. The policy of the Board of Trustees has, from the beginning, been in uniform harmony with the object for which the College was founded.

2. The growth of the College itself is simply the development of a plan of organization devised in conformity with Congressional law and adopted at its opening.

3. The several faculties are composed of men who are fitted not only by study and experience, but by their enthusiasm, for the special lines of instruction they have in charge.

4. In all matters that concern the welfare and progress of the institution its officers are in harmony.

5. The people are manifesting a preference, which increases year

by year, for that kind of education wherein practical ability transcends mere verbal adroitness.

6. The courses of study are arranged with direct reference to their practical bearing on the employments and duties of future life.

7. Last, but by no means least, the Trustees have managed the endowment fund with a care so uniformly wise and watchful that the annual income of the Iowa Agricultural College exceeds in amount that of any other national industrial school in the country.

With similar brevity a glimpse may be given of the results already attained. Premising that, from the nature of the enterprise, these results will increase in a higher ratio every year, we point with pride to the fact that the Agricultural College has now one hundred and sixty-five graduates who are engaged, with credit to themselves, in the various pursuits and professions for which they had received a liberal preparation. Farmers, stock-breeders, horticulturists, teachers, editors, engineers, master-mechanics, architects, and professors in this and other industrial institutions, may be found among their number. And while all are doing creditable work as graduates of the College, some, though still young, are holding positions of influence and trust which exceptional ability qualifies them to fill.

But of those who enter the Agricultural College, only about one-sixth are able, from lack of means and other reasons, to complete one of the courses and attain graduation. Those students, however, who leave before the closing year, gain their measure of benefit from the industrial studies they have pursued. We have, consequently, not less than a thousand under-graduates in the State and the West, whose character and habits of labor have been more or less influenced by the instruction received at the College. To these results, which the Congressional law insists upon as the leading object of the enterprise, may be added the many ways in which the Agricultural College is aiding, directly or indirectly, the industries of the State. Among these may be mentioned the experiments made in feeding, experiments in horticultural products and processes, the introduction of Russian fruits, and the printing and wide circulation of the College Quarterly, which is the organ of all the industrial departments.

#### APPARATUS AND MEANS OF INSTRUCTION.

Many of the twelve schools of instruction into which the institution is conveniently divided, are well supplied with facilities for illus-

tration, purchased from time to time with an appropriation from the interest fund.

The library with its six thousand well bound volumes, most of which treat of subjects related to industrial art and science, contributes its indispensable help to all the schools; the printing office, furnished with its cases of type, its jobber and steam press; the two shops, one for working in wood, and the other in iron, both fitted up with suitable machinery and tools; the chemical laboratory, wherein a hundred students find means to conduct chemical experiments; the physical and botanical and horticultural laboratories, each having its appropriate collection; the general museum; the stables, with their pure blooded animals; the veterinary school with its temporary hospital, all together go to make up the equipment without which no institution like this can accomplish its purpose.

#### THE FUNDS OF THE AGRICULTURAL COLLEGE.

It is a marvelous fact that not a few citizens of Iowa who are intelligent in other matters, still cling to the delusion that the Agricultural College is supported wholly by taxes imposed on the people. This remarkable error which reveals itself every year despite our constant efforts to throw the light of truth upon it, will justify a brief repetition of the facts in the case, facts which are indeed trite enough to the friends of the institution.

In 1862, Congress enacted a law offering to every State in the Union a grant of lands at the rate of thirty thousand acres to each congressional senator and representative from such State, for the maintenance of one or more colleges wherein the leading sciences taught shall be related to agriculture and the mechanic arts. This act imposed on each State accepting the grant the following conditions, namely: The fund arising from the disposal of the lands so received should be sacredly kept from diminution, and the interest accruing therefrom should be applied to meet all the current expenses of the college described, while the State, on its part, should pay from its own treasury the expense of handling the lands thus granted and erect and keep in repair all necessary buildings.

Our State of Iowa at once accepted this munificent offer and thereby bound itself, as the trustee of a noble endowment, to fulfill all the accompanying conditions. Under a contract between the nation and the State, the latter in 1864, received in trust for establishing an Ag-

ricultural College, 204,309 acres. These lands by virtue of a project subsequently adopted, were offered for lease instead of sale. The lessee was required to pay annually, in advance, eight per cent on the appraised value of the land, with the right to purchase at the end of ten years. In case of failure to pay the interest when due the land, with all the improvements, reverts to the College.

A quick demand for the land on these terms showed at once the wisdom of the project, and brought an immediate revenue to the institution. These rents together with the interest on the sum of \$71,000 accruing from the sale of lands whose leases have expired, make up the present income of the Agricultural College, amounting in the aggregate, to \$40,000 a year.

The current expenditures, such as salaries of officers, management of the farm, gardens, stock; the purchase of implements, apparatus, books and all other collections, are paid from this annual fund. But the erection and repair of all buildings essential to the success of the enterprise, and all the expense of disposing of the lands, whether by rent or sale, and the care of the permanent fund created thereby, has been assumed by the State under the terms of an express contract.

#### PRESSING NEEDS OF THE AGRICULTURAL COLLEGE.

The wants of every new institution will increase in proportion as its growth advances. The progress of the Agricultural College during the last five years has been uniform and constant, and its necessities have multiplied in similar ratio. In fulfillment of the contract made when the Congressional grant was accepted, the Legislature has hitherto supplied these necessities in a liberal spirit. Appropriations for additional buildings have been made whenever the further development of the enterprise demanded their erection. In this way the stock barn, the work-shop, and the three laboratories were planned and built. And every dollar expended by the State for the buildings occupied by the College, has been invested in accordance with a clear and well-defined contract.

Seventeen years ago Congress offered this State a grant of lands amounting to over two hundred and four thousand acres, the proceeds of which should maintain an industrial college (provided the State should meet all the expense of handling the land and of erecting all the necessary buildings). This proposal was offered by the nation and accepted by the State. On the part of the nation, 204,309 acres were

made over to Iowa, which now bring to the College an income, either by rent or interest, of \$40,000 a year. The State, on its part, has supplied buildings needed up to 1878, but has failed to fulfill its contract to provide means to keep them in repair and to meet the expenses of handling the land.

The College now asks the Legislature for a complete fulfillment of this express contract. Under the urgent necessity which it would be a violation of their oaths of office to hide, the Trustees cannot do less than to report to the coming Assembly that the State has neglected to furnish the means for repairing its buildings according to contract; that the College has now three departments, organized to meet a great public demand, which are utterly lacking in the buildings indispensable to their operations; that the arrangement they have made for experiments in farming under Professor Knapp, will require further facilities for feeding, and that the constantly increasing numbers who apply for admission to the College, call imperatively for a further supply of room for their accommodation. But let us look at these unquestionable needs individually.

#### EXPERIMENTAL KITCHEN.

Three years ago the department of Domestic Economy was organized, and an experimental kitchen opened in a small basement room, where the young ladies of a single class were taught the theory and practice of cooking and other household arts. The pupils increased in number and became enthusiastic. The department was at once greeted from every quarter with the indications of popular favor. The Iowa journals gave it their emphatic commendation, and letters of inquiry and encouragement were received from nearly every State in the Union. Yet the utmost that we could do for the first experimental kitchen ever opened in any college was to add another little room for it in the basement, where the girls were compelled to practice the culinary art in small detachments. It has been evident throughout the year just closed, that this interesting and highly useful branch of our enterprise must either have rooms of its own in a separate building or be hopelessly dwarfed; and this latter alternative cannot be contemplated for a moment. No other course is left but to ask the Legislature to provide the means for erecting a new building wherein the experimental kitchen shall have abundant rooms for all its various operations.



## THE DEPARTMENT OF BOTANY AND VETERINARY SCIENCE.

Beside the extreme scantiness of space for the experimental kitchen, it was found last year that the recitation rooms in the main building were inadequate to the number of classes daily reciting. We resorted to every possible expedient to make them answer for the work of the year. One department was, however, wholly destitute of a place for its exercises. At the close of the year the President, under the pressure of hard necessity for more room, gave up the residence assigned to his family, went into narrower quarters and commenced building for himself. On the opening of the term last spring, the departments of Botany and Veterinary Science took possession of the vacated dwelling, and have conducted their operations in its rooms throughout the year.

There are, however, very serious reasons why this expensive dwelling should not permanently serve the purpose for which it was temporarily employed. It is, in the first place, a grave question whether, having been built expressly for the residence of an officer, it can be legally given over to be used for laboratories and lecture rooms. It cannot, in the next place, be profitably devoted to such ends without expensive modifications, which would greatly injure its costly finishing. It is, moreover, greatly needed by officers of the College, for a residence. And, finally, buildings could be provided for these departments at far less cost to the State.

For such reasons, it seems imperative that a new building should be erected for the Veterinary School which shall contain, in the second story, a suite of rooms adequate to the wants of the School of Botany.

## THE SCHOOL OF VETERINARY SCIENCE

Has been fully organized this year and is now prepared to give the complete course of instruction necessary to the graduation of veterinary physicians. It has opened with great promise, and enjoys in the highest degree the public favor. It is, moreover, well supplied with other equipments, but how can it meet a great public want without a local habitation?

## BOARDING COTTAGES.

Under a pressure that cannot be withstood, we are compelled to ask also a limited sum to be expended in the building of cottages for students. It is beyond question that the addition, with a moderate out-



lay, of four or six such tenements would accommodate from seventy to ninety students, who cannot otherwise secure the advantages of a higher education. Plans for plain, substantial dwellings will be drawn and careful estimates of cost made by our architect, and the Legislature made fully acquainted with this pressing need.

Respecting the needs of his department, Professor Bessey writes as follows:

"The pressure for more rooms for this department was temporarily met a year ago by assigning it a portion of a dwelling house upon the grounds vacated for that purpose. This supplied good rooms, although too small for the large classes in botany, which often reach or exceed one hundred. The need of this dwelling house for its legitimate purpose, makes it necessary again to provide for the classes and apparatus of this department. There are no available class-rooms in the other College buildings, large enough to accommodate the classes in botany; neither can rooms be obtained for the laboratory, herbarium and study, without occupying and making considerable changes in the rooms in the main building, now filled with students.

"The department must have four rooms, viz.; (1) a class or lecture room large enough to comfortably seat one hundred or more students; (2) a well-lighted laboratory, large enough to contain the tables and cases needed in the microscopical study of plants—as this is work in which no crowding is possible, the room must be of good size, and as good light is absolutely necessary, it must have the proper aspect; (3) a room for the herbarium and cabinet of economic botany—these collections are growing and are already of such a size as to require a large room; (4) a professor's study and library—in this the student should have ready access to the works of reference he needs while making his investigations in the laboratory and herbarium."

#### HOUSES FOR EXPERIMENTATION IN FEEDING.

The appointment of S. A. Knapp to the chair of Practical and Experimental Agriculture, secures earnest and successful endeavor in the important department of farm experiments. This part of the enterprise is of vital moment to the State. It may be safely said that every farmer of Iowa is an annual loser from lack of *perfect management* either in crop raising or in feeding for butter, beef, or pork. Moreover, not one farmer in a hundred knows the very best variety of seed for the crop he proposes to raise, and very few appreciate the fact

that perfectly sound and healthy seed of whatever kind, is indispensable to the same qualities in the ripened grain. Now the best processes for an Iowa climate and soil, the most profitable stock for given purposes in this prairie State, the most economical materials and methods in feeding, and the most productive varieties of seed are all to be determined by accurate and careful experiments, whereof the results shall be published and sent broadcast.

The Agricultural College has long desired to enter fully upon this great work, but, until now, the right man and adequate means for the enterprise were not forthcoming. Professor Knapp will commence systematic experimentation next spring and will make a public report of the outcome every fall thereafter. But, after defraying all the expenses of these experiments which can be legally paid out of the College interest fund, there will remain a limited outlay for which the State must provide. Two feeding barns of moderate size, one for hogs and the other for cattle, will be indispensable for testing the value of different foods under different methods of preparation. The comparatively small expense of erecting these buildings will fall upon the State, and no appropriation which the Legislature ever made will be surer of profitable returns.

#### SUM TOTAL.

The list of improvements mentioned above might seem to indicate that the aggregate of appropriations which the Trustees ask for will be large. To this we may reply that the College desires the State, in meeting its necessities for further buildings, to furnish only such moderate means as will secure strength and durability, rather than esthetic effect, and the sum total of the appropriations sought will consequently be comparatively moderate.

A. S. WELCH, *President.*

## FINANCIAL REPORTS.

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### APPROPRIATIONS OF THE SEVENTEENTH GENERAL ASSEMBLY.

#### REPORT OF COMMITTEE APPOINTED TO CONSTRUCT COLLEGE SEWER.

*To the Board of Trustees:*

Your honorable body at its meeting in November, 1877, ordered:

"That the Legislature be memorialized to appropriate the sum of \$1,500 for building a new sewer. It being, however, a work that must be completed during the winter vacation, and one imperatively necessary for the health of students and others occupying the building, we would recommend that the College authorities borrow the money necessary to construct said sewer, and reimburse themselves when the appropriation shall be made by the Legislature to pay for said work; and that Professors Budd and Beal be authorized to make all purchases of material and superintend all work necessary to the construction of said sewer."

Your committee would respectfully report that the work could not be commenced until after the close of the college in November, and the utmost despatch was required to complete the sewer in advance of severe winter freezing.

The contract for furnishing the cement pipes was awarded to the Iowa Carbonated Stone Pipe Company, of Des Moines.

The work of excavating and filling was divided into allotments and let to as many parties, in order to hasten the work.

The most approved principles of sanitary engineering have been carefully considered during all the stages of construction.

Appended will be found an exhibit of receipts and expenditures. As required by law, duplicate receipts have been taken for all moneys expended, which have been duly forwarded to the State Auditor.

[Signed]

J. L. BUDD,  
F. E. L. BEAL, } *Committee.*

## EXHIBIT A.

## RECEIPTS.

Amount received from State Treasurer on account of appropriation for new sewer.....\$1,472.25

## EXPENDITURES.

1877.

Vou. 1.	Dec.	6.	To paid E. Whalen for work.....	\$101.50
Vou. 2.	Dec.	7.	To paid freight on material ...	40.32
Vou. 3.	Dec.	8.	To paid expenses of J. L. Budd purchasing tools.....	2.00
Vou. 4.	Dec.	8.	To paid J. Erb for work.....	30.00
Vou. 5.	Dec.	10.	To paid J. K. Cameron for work.....	44.25
Vou. 6.	Dec.	10.	To paid Iowa Carbonated Stone Pipe Company for tile ....	628.80
Vou. 7.	Dec.	29.	To paid E. Whalen for work.....	38.87
Vou. 8.	Dec.	29.	To paid freight on material.....	54.60
Vou. 9.	Dec.	29.	To paid S. J. Anderson for work.....	5.47

1878.

Vou. 10.	Jan.	2.	To paid G. K. Cameron for work .....	11.25
Vou. 11.	Jan.	2.	To paid H. Milligan for work .....	2.04
Vou. 12.	Jan.	12.	To paid L. L. Eastwood for work .....	1.12
Vou. 12.	Jan.	12.	To paid J. Gilmore for work.....	3.76
Vou. 13.	Jan.	12.	To paid J. Sexton for work .....	2.70
Vou. 14.	Jan.	12.	To paid college farm for lumber ....	8.00
Vou. 15.	Jan.	12.	To paid H. W. Tripp for work .....	50.00
Vou. 16.	Jan.	12.	To paid J. Wood for work.....	43.75
Vou. 17.	Jan.	12.	To paid J. Erb for work .....	11.25
Vou. 18.	Jan.	16.	To paid Nichols & Maxwell for hauling ..	23.99
Vou. 19.	Feb.	8.	To paid for pipe material .....	16.87
Vou. 20.	March	10.	To paid W. Clark for cement .....	3.00
Vou. 21.	April	16.	To paid sundry persons for labor .....	9.40
Vou. 22.	May	11.	To paid M. Gifford for work .....	5.98
Vou. 23.	May	11.	To paid W. Whited for work.....	.81
Vou. 24.	May	16.	To paid Lamb & Son for lumber.....	3.50
Vou. 25.	May	16.	To paid W. G. Wright for material .....	43.74
Vou. 26.	May	16.	To paid Bingham & Barroll for material .....	3.75
Vou. 27.	June	5.	To paid J. Wood for work .....	1.75
Vou. 28.	June	5.	To paid S. M. Pedrick for work .....	1.62
Vou. 29.	June	12.	To paid M. Gifford for work .....	4.95
Vou. 30.	Aug.	3.	To paid college workshop for material .....	26.94
Vou. 31.	Aug.	6.	To paid E. Whalen for work .....	18.00
Vou. 32.	Aug.	7.	To paid W. G. Wright for material.....	22.90
Vou. 33.	Aug.	26.	To paid E. Whalen for work .....	6.00
Vou. 34.	Sept.	2.	To paid Iowa Carbonate Stone Pipe Company for tile.....	11.70
Vou. 35.	Nov.	13.	To paid college farm for use of tools.....	15.00
Vou. 36.	Nov.	13.	To paid freight on material.....	11.70
Vou. 37.	Nov.	13.	To paid Iowa Carbonated Stone Pipe Company for tile....	60.75
Vou. 38.	Nov.	13.	To paid B. Read for cement.....	1.25
Vou. 39.	Nov.	13.	To paid E. Whalen for work.....	50.00
Vou. 40.	Nov.	13.	To paid Nichols & Maxwell for hauling .....	2.50

1879.

Vou. 41.	Jan.	1.	To paid F. E. L. Beal's expenses buying material .....	2.50
Vou. 42.	Jan.	1.	To paid Chavannes & Whalen for work.....	38.50
Vou. 43.	Jan.	7.	To paid J. Sexton for work .....	5.47

Total..... 1,472.25

REPORT OF COMMITTEE APPOINTED TO CONSTRUCT HORTICULTURAL LABORATORY.

*To the Board of Trustees:*

The act of the Seventeenth General Assembly making an appropriation of the sum of \$2,500.00 for the Horticultural Laboratory, not being available by the special provisions of the Act until 1879, induced your Honorable Body at its meeting in May, 1878, to appoint the undersigned as a committee to arrange plans for and erect the same, during the summer of 1878, with funds borrowed for the purpose. Your committee was met on the start with the usual difficulties growing out of a totally inadequate appropriation. The Legislature appropriated only five-twelfths of the amount—based upon careful estimates—asked for by the Board. This reduction compelled the committee to plan a cheap wooden structure for class room, office, seed room, specimen room, store room, etc., with attached propagating pits, grafting room, etc., of restricted size and cheap construction.

In carrying out these modest plans, neither creditable to the College nor the State, the appropriation would still have been inadequate had not firms, in Clinton, Iowa, generously furnished the lumber, doors, sash, etc., at prices below dealers rates. Active competition also permitted letting the contracts for labor at hard times prices.

Appended will be found an exhibit of receipts and expenditures.

As required by law, duplicate receipts have been taken for all moneys expended, which have been duly forwarded to the State Auditor.

[Signed]

JOHN N. DIXON, }  
BUEL SHERMAN, } *Committee.*  
J. L. BUDD, }

EXHIBIT B.

RECEIPTS.

Amount received from State Treasurer on account of appropriations for Horticultural Laboratory..... \$2,600.00

EXPENDITURES.

1878.			
Vou. 1.	June 5.	To paid L. Whalen for work.....	\$ 21.22
Vou. 2.	June 5.	To paid J. Sexton for work .....	28.08
Vou. 3.	June 14.	To paid P. L. Porter for 27,000 brick... ..	202.50
Vou. 4.	June 14.	To paid W. Lindsay for work.....	40.00
Vou. 5.	June 25.	To paid C. Lamb & Son for lumber.....	389.05
Vou. 6.	June 26.	To paid freight on material .....	67.77
Vou. 7.	June 26.	To paid J. Sexton for work and material.....	14.15
Vou. 8.	June 26.	To paid W. Clark for material .....	25.69
Vou. 9.	July 25.	To paid Alvord & Basket on contract building.....	75.00
Vou. 10.	July 29.	To paid J. L. Hines, on painting contract .....	10.00
Vou. 11.	Aug. 8.	To paid Curtis & Bros., material.....	109.71
Vou. 12.	Aug. 8.	To paid Alvord & Basket on contract, building.. ..	125.00
Vou. 13.	Aug. 8.	To paid J. Basket for plastering.....	10.50
Vou. 14.	Aug. 9.	To paid freight on material.....	27.88
Vou. 15.	Aug. 14.	To paid freight on material.....	4.05
Vou. 16.	Aug. 14.	To paid Nichols & Maxwell, hauling.....	11.40
Vou. 17.	Aug. 14.	To paid J. Elliot for material.....	1.75
Vou. 18.	Aug. 15.	To paid J. Lindsay for work.....	50.00
Vou. 19.	Aug. 19.	To paid P. L. Porter for brick... ..	75.00
Vou. 20.	Aug. 22.	To paid Alvord & Basket for work.....	14.50
Vou. 21.	Aug. 24.	To paid Hutchins & Co. for material.....	101.00
Vou. 22.	Aug. 29.	To paid Chamberlain & Clark for material.....	48.48
Vou. 23.	Aug. 29.	To paid W. G. Wright for material.....	72.87
Vou. 24.	Aug. 29.	To paid Tilden & McLain for material.....	75.56
Vou. 25.	Aug. 30.	To paid J. Sexton for work.....	13.40
Vou. 26.	Sept. 2.	To paid C. Lamb & Son for material.....	145.77
Vou. 27.	Sept. 4.	To paid E. Whalen for work.....	12.50
Vou. 28.	Sept. 9.	To paid J. S. Barning for work.....	22.05
Vou. 29.	Sept. 9.	To paid J. L. Hines on painting contract.....	25.00
Vou. 30.	Sept. 14.	To paid T J. Andre for work .....	4.40
Vou. 31.	Sept. 14.	To paid F. Turner for work .....	12.35
Vou. 32.	Sept. 14.	To paid W. Whited for work.....	1.75
Vou. 33.	Sept. 14.	To paid L. L. Eastwood for work.....	8.84
Vou. 34.	Sept. 14.	To paid J. Sexton for work.....	9.68
Vou. 35.	Sept. 14.	To paid J. L. Hines on painting contract .....	34.00
Vou. 36.	Sept. 16.	To paid Nichols & Maxwell, hauling.....	7.85
Vou. 37.	Sept. 16.	To paid freight on material.....	9.60
Vou. 38.	Sept. 16.	To paid freight on material....	.67
Vou. 39.	Sept. 21.	To paid freight on material.....	.64
Vou. 40.	Sept. 28.	To paid P. L. Porter for brick .....	43.00
Vou. 41.	Oct. 14.	To paid E. Whalen for work.....	3.00
Vou. 42.	Oct. 14.	To paid Crane Bros. for material .....	9.59
Vou. 43.	Oct. 17.	To paid E. Patterson for work .....	7.50
Vou. 44.	Oct. 17.	To paid freight on material.....	.23
Vou. 45.	Oct. 18.	To paid E. Patterson for work.....	29.75
Vou. 46.	Oct. 18.	To paid L. L. Eastwood for work... ..	4.59

Vou. 47.	Oct. 23.	To paid P. L. Porter for brick.....	18.85
Vou. 48.	Oct. 23.	To paid Thomas & McLain for material .....	25.47
Vou. 49.	Oct. 23.	To paid G. W. Wright for material.....	18.93
Vou. 50.	Oct. 26.	To paid D. Basket for plastering .....	102.75
Vou. 51.	Oct. 23.	To paid J. Basket for lathing.....	7.41
Vou. 52.	Nov. 5.	To paid Boyd & Chapman for material.....	10.00
Vou. 53.	Nov. 5.	To paid Nichols & Maxwell, hauling.....	2.40
Vou. 54.	Nov. 5.	To paid Lamb & Son for lumber.....	116.35
Vou. 55.	Nov. 13.	To paid Oollege Farm for work... ..	14.10
Vou. 56.	Nov. 13.	To paid L. L. Eastwood for work .....	12.32
Vou. 57.	Nov. 13.	To paid Chamberlain & Clark for material .....	9.82
Vou. 58.	Nov. 13.	To paid Thomas & McLain for material.....	2.33
Vou. 59.	Nov. 13.	To paid J. L. Budd, expenses and amount paid workmen ..	47.45
Vou. 60.	Nov. 11.	To paid J. L. Hines for plastering . .....	40.00
Vou. 60.	Dec. 5.	To paid W. S. Lindsay for work .....	36.93
1879.			
Vou. 61.	Jan. 1.	To paid Lamb & Son for lumber .....	2.60
Vou. 62.	Jan. 1.	To paid Bingham & Barroll for material.....	2.88
Vou. 63.	Jan. 1.	To paid Lamb & Son for lumber.....	6.25
Vou. 64.	Jan. 1.	To paid J. Basket for work .....	9.00
Vou. 65.	Jan. 8.	To paid J. Basket for work.....	5.82
Total .....			<u>2,500.00</u>

## REPORT OF THE TREASURER.

[FOR THE YEAR ENDING NOV. 13, 1878.]

*The following are the Receipts and Expenditures on account of the different College Funds for the Year ending November 13, 1878.*

## PERMANENT ENDOWMENT FUND.

## RECEIPTS.

	Dr.	Cr.
Balance from last year.....		\$68,782.87
Amount from sales of College lands .....		1,580.00

## EXPENDITURES.

Total amount paid State Treasurer for investment .....	\$70,362.87	
	70,362.87—	70,362.87

## CONTINGENT PRINCIPAL FUND.

Amount from sale of Sioux City lands.....		1,800.00
Amount on hand .....	1,800.00	

## INTEREST FUND.

## RECEIPTS.

Balance from last year.....		216.39
Amount from G. W. Bassett, College land agent ... ..		29,992.48
Amount from Boarding Department, an old debt .....		404.83
Amount from State Treasurer, interest on investments.....		5,417.74
Amount from Workshop, balance over expenditures . . . . .		308.74
Amount from Farm Household, balance over expenditures.....		75.72
Total receipts .....		36,415.90

## EXPENDITURES.

Amount transferred from Contingent Principal Fund.....	360.00	
Paid for Chemical Laboratory.....	205.25	
Paid for College Quarterly .....	274.60	
Paid for Farm Department .....	1,982.79	
Paid for Horticultural Department.....	991.46	
Paid for salaries.....	28,063.51	
Paid for museum.....	153.96	
Paid for civil engineering.....	112.03	
Paid for armory .....	300.00	
Paid for library ..	688.62	
Paid for contingent expenses... ..	1,668.04	
Paid for ornamental grounds.....	607.28	
Paid for experimental kitchen .....	146.81	
Paid for printing office .....	143.36	
Paid for fires and lights .....	183.87	
Paid for Veterinary Department .....	128.77	
Paid for Botany and Entomology....	311.28	
Paid for Physical Laboratory.....	247.80	
Total expended.....	36,608.93	
Amount overdrawn.....		193.02
	36,608.93—	36,608.93



CONTINGENT FUND.

RECEIPTS.

Balance from last year.....	1,340.50
Amount from leases of Sioux City lands.....	2,669.84
Total receipts .....	<u>4,010.34</u>

EXPENDITURES.

Paid College Workshop, per order of Board .....	86.37
Paid J. L. Geddes for barn .....	64.00
Paid E. W. Stanton's expenses to Ft. Dodge.....	6.70
Paid G. W. Bassett salary and blank book .....	30.55
Paid G. W. Bassett salary .....	37.50
Paid for College repairs ...	33.32
Paid W. D. Lucas for exchange .....	100.00
Total expended ..	<u>858.44</u>
Amount unexpended ...	<u>3,651.90</u>
	<u>4,010.34— 4,010.34</u>

BOARDING DEPARTMENT.

RECEIPTS.

Balance from last year .....	1,355.63
Amount from students and others for board.....	14,572.98
Total receipts .....	<u>15,928.61</u>

EXPENDITURES.

Paid on account of supplies, labor and furnishing .....	14,930.45
Amount from increase of inventory .....	37.45
Amount unexpended .....	<u>960.71</u>
	<u>15,928.61— 15,928.61</u>

INTEREST ON NOTES.

Balance from last year.....	29.10
Amount from interest on sundry notes .....	120.30
Amount unexpended .....	<u>149.40</u>
	<u>149.40— 149.40</u>

DONATIONS.

RECEIPTS.

Balance from last year.....	155.00
Amount from land sold .....	<u>200.00</u>
Total receipts .....	<u>355.00</u>

EXPENDITURES.

Paid J. L. Budd's expenses to Des Moines.....	46.60
Amount unexpended .....	<u>308.40</u>
	<u>355.00— 355.00</u>

SEED APPROPRIATION.

Balance from last year.....	141.67
Amount unexpended ...	<u>141.67</u>

FURNACE PIPING APPROPRIATION.

Balance from last year.....	150.00
Amount unexpended .....	<u>150.00</u>

## DIPLOMAS.

## RECEIPTS.

Balance from last year.....	25.00
Amount received for diplomas.....	104.00
Total receipts .....	129.00

## EXPENDITURES.

Paid for diploma material .....	119.55
Amount unexpended .....	10.45
	<u>120.00—</u>
	120.00

## FARM HOUSE PAINTING APPROPRIATION.

## RECEIPTS.

Balance from last year .....	\$ 1.45
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## EXPENDITURES.

Paid J. J. Bosquet's bill of paint.....	\$ .68
Amount unexpended.....	.77
	<u>1.45</u>
	1.45

## SCHOOL BOOKS.

Dr., balance from last year...	225.41
Amount received from school books.....	40.25
Balance due from school book department.....	185.16
	<u>225.41</u>
	225.41

## BILLS RECEIVABLE.

Balance from last year.....	2,851.99
Notes received during 1878.....	218.00
Total notes received .....	2,599.99
Notes paid during the year.....	2,053.49
Amount of notes on hand.....	546.50
	<u>2,599.99</u>
	2,599.99

## STATE TREASURER.

Balance from last year, sales of land.....	68,782.87
Amount from same source in 1878.....	1,580.00
Total in hands of treasurer .....	<u>70,362.87</u>

## NEW SEWER.

## RECEIPTS.

Amount from J. L. Budd, <i>borrowed</i> .....	1,472.25
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## EXPENDITURES.

Amount paid for work and material .....	1,425.78
Amount unexpended .....	46.47
	<u>1,472.25</u>
	1,472.25

## HORTICULTURAL LABORATORY.

## RECEIPTS.

Amount received from J. L. Budd, <i>borrowed</i> ....	2,500.00
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## EXPENDITURES.

Paid for work and material.....	2,436.52
Amount unexpended.....	63.48
	<u>2,500.00</u>
	2,500.00

PERSONAL ACCOUNTS.

Amount due from sundry persons..... 554.80

CASH.

RECEIPTS.

Balance from last year..... 184.65  
Amount received from all sources..... 65,965.28  
Total receipts..... 66,149.93

EXPENDITURES.

Amount paid out as per vouchers..... 60,346.17  
Balance cash on hand..... 5,803.76  
66,149.93 66,149.93

The cash on hand belongs to the following accounts:

Boarding Department.....\$ 960.71  
New Sewer . . . . . 46.47  
Horticultural Laboratory..... 63.48  
Contingent Principal Fund.. . . . 1,800.00  
2,870.66  
Balance available for any purpose to which the Board may desire to appropriate it..... 2,933.10  
Total cash on hand..... 5,803.76

SUMMARY.

	Dr.		Cr.
School books.....	\$ 185.16	Boarding department.....	\$ 960.71
State treasurer ..	70,862.87	New sewer .....	46.47
Bills receivable.....	546.50	Interest on notes .....	149.40
Cash on hand.....	5,803.76	Contingent fund .....	3,651.90
Personal accounts.....	554.80	Furnace piping appropriation....	150.00
Interest fund.....	193.03	Contingent principal fund.....	1,800 00
		Diplomas.....	10.45
		Permanent End. fund .....	70,862.87
		Donations .....	308.40
		Seed appropriation... ..	141.67
		Farm House painting appropriation...	.77
		Horticultural laboratory.....	63.48
Total.....	\$ 77,646.12	Total .....	\$ 77,646.12

Respectfully submitted,  
J. L. GEDDES,  
Deputy Treasurer.

## REPORT OF THE SECRETARY OF THE BOARD OF TRUSTEES.

[FOR THE FISCAL YEAR ENDING NOVEMBER 13, 1878.]

IOWA AGRICULTURAL COLLEGE, }  
Dec. 3, 1878. }

*To the Honorable Board of Trustees:*

IN the statute prescribing the duties of the Secretary of the Board of Trustees it is specified that "he shall keep an account with the Treasurer of the College, charging him with all moneys paid to him from whatever source and crediting him with the amounts paid out by him upon the order of the Board of Audit." As directed by this law, I have, during the past year, opened and kept an account with the Treasurer, Wm. D. Lucas. At the beginning of the fiscal year, Nov. 15, 1877, there was in his hands a balance from the previous year of \$184.65. During the year I have charged him with cash received from various sources as follows: From Agent Bassett, rental on Endowment Fund land, \$29,992.48; from Agent Bassett, proceeds of sales of Contingent Fund land, \$1,440; from Agent Bassett, rental on Contingent Fund land, \$2,669.84; from the State Treasurer, interest on Endowment Fund loaned by him, \$5,417.74; from the payment of notes given for stock, etc., purchased of the College, \$1,795.49; from interest paid on these notes, \$120.30; from the sale of land donated to the College, \$200; from School Book Department, amount paid on old debt due Interest Fund, \$40.25; from diplomas, sold graduating class, \$105; from Prof. J. L. Budd, amount borrowed to construct the new sewer, \$1,472.25; from J. L. Budd, amount borrowed to build the Horticultural Laboratory, \$2,500; from the farm, horticultural, boarding and other departments of the College, and from all other sources not hitherto mentioned, except from the sale of Endowment Fund land, the sum of \$20,211.93, making, with the balance on hand at the beginning of the year, a total charge against the Treasurer of \$66,149.93. I have credited him with cash paid out upon bills approved by the Board of Audit to the amount of \$60,346.17, leaving as the cash balance in his hands at the close of the fiscal year, Nov. 13, 1878, the sum of \$5,803.76.

In addition to the sums mentioned above, the Treasurer of the College has received from Agent Bassett the sum of \$1,580, the same

being the proceeds of Endowment Fund land sold by the agent during the year. This amount he has forwarded to the State Treasurer as required by law. Added to the \$68,782.87 forwarded in previous years, it makes the total Endowment Fund now in the hands of the State Treasurer \$70,362.87. The present condition of this fund I have no means of knowing. On page 283 of the Seventh Biennial Report will be found its condition at the close of the fiscal year ending Nov. 14, 1877. Since then the State Treasurer has received from the Treasurer of the College the \$1,580 mentioned above; he has also collected a portion of the amount invested at the beginning of the year—just how much I do not know. I am therefore unable to tell the amount now invested or the amount awaiting investment. Concerning all other financial transactions connected with the management of the College funds I am able to give the Board full and complete information, for detailed statements are filed each month in my office. The Treasurer of State is not required by law to make any report to the Board of Trustees. It would be well if arrangements could be made by which he should report to me each month, or at least annually to the Board, at the end of the fiscal year.

In addition to keeping an account with the Treasurer of the College, I have, in connection with the President, examined all bills presented for payment, auditing such as were just and proper claims against the institution and for the payment of which the requisite appropriations had been made.

As a member of the Board of Audit I have, as required by Sec. 1613 of the Code of 1873, made a thorough examination of the books of the College Treasurer. In the course of this examination I have compared the duplicate receipts filed in my office with the stub of the Treasurer's receipt book. I have carefully reviewed the posting from the receipt book to the cash book. I have examined each original entry in the day book, comparing it with the corresponding receipt or voucher. I have taken note of the character of each voucher and looked to see whether it was properly audited and receipted. I have added both debit and credit sides of the cash account. I have closely inspected the work reports, the personal accounts of officers and employees and the accounts of the different departments. I have tested in various ways the accuracy of the books and accounts of the Treasurer. The errors discovered have been corrected, and I am now

prepared to certify that the Treasurer has debited himself with all cash received; that he has proper vouchers for all moneys which he claims to have paid out; and that the accounts for the fiscal year ending Nov. 13, 1878, as kept by the Deputy Treasurer, are correct.

Respectfully submitted,

E. W. STANTON,  
*Secretary Board of Trustees.*

REPORT OF THE TREASURER.

(FOR THE YEAR ENDING NOV. 12, 1879.)

*The following are the Receipts and Expenditures on account of the different College Funds for the Year ending November 12, 1879.*

PERMANENT ENDOWMENT FUND.

RECEIPTS.		Dr.	Cr.
Balance from last year.....			\$70,862.87
Amount from sales of College lands .....			1,880.00
EXPENDITURES.			
Total amount paid State Treasurer for investment .....	\$71,742.87		
	71,742.87—	71,742.87	

CONTINGENT PRINCIPAL FUND.

RECEIPTS.			
Balance from last year.....			1,800.00
Amount from G. W. Bassett, College land agent.....			720.00
EXPENDITURES.			
Amount invested by G. W. Bassett in mortgages.....	1,800.00		
Amount expended.....	1,800.00		
Amount unexpended ...	720.00		
	2,520.00—	2,520.00	

CONTINGENT FUND.

RECEIPTS.			
Balance from last year .....			3,651.90
Amount from leases of Sioux City lands.....			2,295.67
Amount from interest on notes .....			172.16
Total receipts .....			6,119.73
EXPENDITURES.			
Paid J. L. Geddes' expenses to Chicago .....	25.40		
Paid J. L. Budd interest on loan.....	219.53		
Paid A. S. Welch's expenses.....	35.00		
Paid G. W. Bassett's salary to November, 1878 .....	87.50		
Amount expended .....	317.43		
Amount unexpended ....	5,802.30		
	6,119.73—	6,119.73	

INTEREST FUND.

RECEIPTS.			
Amount from G. W. Bassett, College Agent....			31,695.76
Amount from State Treasurer, interest on investments .....			6,140.77
Total receipts .....			37,836.53

EXPENDITURES.	
Balance from last year.....	198.03
Paid A. S. Welch for furniture .....	80.00
Paid for Chemical Laboratory.....	198.70
Paid for College Workshop .....	519.45
Paid for water tank.....	200.00
Paid for Farm Department .....	2,036.49
Paid for Horticultural Department .....	1,041.10
Paid for salaries ... ..	25,827.84
Paid for Horticultural Laboratory furniture .....	242.99
Paid for Botanical Laboratory furniture .....	193.85
Paid for Entomology .....	123.77
Paid for Domestic Economy Kitchen .....	292.33
Paid for College statement.....	150.00
Paid for civil engineering .....	138.00
Paid for Farm Household .....	30.28
Paid for <i>College Quarterly</i> .....	461.75
Paid for Museum .. ..	45.60
Paid for College Library.....	1,050.00
Paid for Physical Laboratory. ....	204.65
Paid for Veterinary Department .....	190.96
Paid for ornamental grounds .....	500.00
Paid for fires and lights .....	1,460.76
Paid for College Printing office ....	131.12
Paid for Botany .....	382.57
Paid for contingent expenses .....	1,456.69
Paid for Military Department.....	250.00
Amount expended .....	37,401.93
Amount unexpended .....	434.60
	<hr/>
	37,836.53— 37,836.53

ROOM RENT.

RECEIPTS.	
Received from room rent both terms.....	894.08
Credit balance from laundry account.....	11.436
Credit balance incidental account.....	209.2
Total credit.....	<hr/> 1,114.72

DISBURSEMENTS.

For repairs to College building for the purpose of keeping it in good condition for occupancy by students.....	433.08
For repairing and purchasing furniture used by students in College building.	472.54
Paid for excess of expenditure over receipts in running the bath rooms.....	41.31
	<hr/> 946.93
Balance on hand available to purchase much needed furniture .....	167.79
	<hr/> 1,114.72— 1,114.72

BOARDING DEPARTMENT.

RECEIPTS.	
Balance from last year....	900 .71
Amount from students and others for board.....	15,444.02
Total receipts.....	<hr/> 16,404.73



EXPENDITURES.		
Paid on account of supplies, labor and furnishing .....	15,576.48	
Amount from increase of inventory.....	30.12	
Amount expended.....	15,606.60	
Amount unexpended.....	798.18	
	16,404.78—	16,404.78

DONATIONS.

RECEIPTS.		
Balance from last year .....		308.40
Received fifty-nine days interest on State warrants.....		38.53
Total receipts .....		346.93

EXPENDITURES.		
Paid E. W. Stanton's expenses.....	6.70	
Paid J. Basket for building coal house.....	15.00	
Paid C. Lamb & Son for lumber.....	36.06	
Paid G. W. Bassett for binding books.....	9.80	
Paid G. Lindsay for plastering.....	15.50	
Paid Thomas & McLain's bill ....	4.75	
Paid Nichols & Maxwell's bill.....	.10	
Paid Hines & La Seur for painting .....	10.00	
Paid College Workshop.....	6.89	
Paid Bingham & Co's bill.....	1.00	
Paid W. G. Wright's bill.....	8.45	
Paid J. L. Budd interest on loan.....	38.53	
Paid Bingham & Co's bill.....	.25	
Paid C. Lamb & Son's lumber bill .....	2.00	
Paid Hines & La Seur for work .....	5.00	
Paid Cameron for brick.....	6.91	
Amount expended.....	166.43	
Amount unexpended. ....	180.50	
	346.93	346.93

SCHOOL BOOKS.

Dr., balance from last year .....	185.16	
Amount received from school book department.....		98.55
Balance due from school book department.....		86.61
	185.16	185.16

BILLS RECEIVABLE.

Balance from last year ... ..	546.50	
Notes received during 1879.....	1,470.15	
Total notes received .....	2,016.65	
Notes paid during the year .....		320.00
Amount of notes on hand .....		1,696.65
	2,016.65	2,016.65

DIPLOMAS.

RECEIPTS.		
Balance from last year.....		10.45
Amount received for diplomas.....		120.00
Total receipts.....		130.45

EXPENDITURES.

Paid J. L. Geddes' expenses to Des Moines.....	4.40	
Paid for diploma material.....	88.28	
Amount expended.....	87.63	
Amount unexpended .....	92.82	
	190.45—	\$ 190.45

STATE TREASURER.

Balance from last year—lands sold . . . . .	70,362.87	
Amount from same source in 1879 .....	1,380.00	
Total debit.....	71,742.87	

SEED APPROPRIATION.

Balance from last year .....		141.67
Amount unexpended.....	141.67	
	141.67—	141.67

FURNACE PIPING APPROPRIATION.

Balance from last year.....		150.00
Amount unexpended .....	150.00	
	150.00—	150.00

FARM-HOUSE PAINTING APPROPRIATION.

Balance from last year.....		.77
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EXPENDITURE.

Paid O. P. Stuckslager for work . . . . .	.77	
	.77—	.77

CREAMERY BUILDING.

Amount received from woodland—sale of lumber.....		246.28
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EXPENDITURES.

Paid for work and material on Creamery building .....	358.81	
Amount expended .....	358.81	
Balance, amount of expenditure over receipts.....		112.53
	358.81—	358.81

BOILER FUND.

Amount received from sale of boiler. ....		100.00
Amount expended repairing Secretary's house .....	100.00	

NEW SEWER APPROPRIATION.

RECEIPTS.

Balance from last year.....		46.47
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EXPENDITURES.

Paid F. E. L. Beal's expenses . . . . .	2.50	
Paid J. L. Budd cash advanced.....	38.56	
Paid J. Sexton for work.....	5.47	
Total expended, as per vouchers filed with State Auditor.....	46.47—	46.47

HORTICULTURAL LABORATORY APPROPRIATION.

RECEIPTS.

Balance from last year ..... \$ 63.48

EXPENDITURES.

Paid W. S. Lindsay for work.....\$ 36.93  
Paid C. Lamb & Sons' bill of lumber..... 2.60  
Paid Bingham & Barrell's bill ..... 2.88  
Paid C. Lamb & Sons for lumber..... 6.25  
Paid J. Basket for work ..... 9.00  
Paid Basket's bill..... 5.82  
Amount expended, as per vouchers filed with Auditor of State..... 63.48— 63.48

PERSONAL ACCOUNTS.

Amount due from sundry persons..... 826.63

CASH.

RECEIPTS.

Balance from last year..... 5,803.76  
Amount received from all sources..... 67,383.88  
Total receipts ..... 73,187.64

EXPENDITURES.

Amount paid out, as per vouchers in Treasurer's office... 67,422.25  
Balance, cash on hand..... 5,765.39  
73,187.64— 73,187.64

Cash on hand belongs to the following accounts, viz.:

Boarding Department..... \$798.13  
Contingent Principal Fund..... 720.00  
\$1,518.13

The above is available for the accounts mentioned only.  
The balance, \$4,247.26, is available for any purpose the Board may desire.

SUMMARY.

	DR.		CR.
School books.....	\$ 86.61	Boarding Department.....	\$ 798.13
State Treasurer ...	71,742.87	Contingent Principal Fund.....	2,520.00
Mortgage receivable.....	1,800.00	Contingent Fund.....	5,802.80
Bills receivable ..	1,696.65	Diplomas.....	92.82
Creamery building .....	112.53	Permanent Endowment Fund.....	71,742.87
Cash on hand .....	5,765.39	Donations ..	180.50
Personal accounts .....	826.63	Room rent .....	167.79
		Seed appropriation...	141.67
		Furnace piping appropriation .....	150.00
		Interest Fund.....	434.60
	\$82,030.68		\$82,030.68

Respectfully submitted,  
J. L. GEDDES,  
Deputy Treasurer.

## REPORT OF THE SECRETARY OF THE BOARD OF TRUSTEES.

[FOR THE YEAR ENDING NOVEMBER 12, 1879.]

IOWA AGRICULTURAL COLLEGE, }  
Nov. 28, 1879. }

*To the Honorable Board of Trustees:*

As provided by the statute, I hereby submit my report of the proceedings of the Board of Audit, together with a statement of the account kept by me with the Treasurer of the College.

It is one of the duties of the Board of Audit to examine all bills presented for payment, and if they are in themselves correct bills against the College, properly payable from its funds, and in accordance with, and not in excess of, the appropriations made by the Board of Trustees, to order them paid by the Treasurer. In the discharge of this duty the Board of Audit have examined all bills paid during the year. Before auditing any bill they require that the correctness of each item of the bill shall be certified to by the head of the department making the purchase. No item not thus signed is allowed. The character of the bill is also noted by the Board of Audit. Under this system it is hardly possible for any false or erroneous claim to pass the Board without detection. It is however, quite difficult to comply strictly with requirement, not to audit bills against a department in excess of the amount appropriated to that department. In every case the appropriation to a department is made up not only of a definite sum set apart from Interest Fund, but also includes all the ordinary sales of the department. This last factor is an indefinite one. The Board of Audit are often compelled to estimate it and audit bills upon the strength of sales not made, but which the department can reasonably expect to make before the close of the fiscal year.

It is the endeavor of the Board of Audit always to leave a sufficient margin so that the appropriation of the Board of Trustees will in no case be finally exceeded. Sometimes, however, the amount realized from sales falls below the estimate and the account shows at the end of the year a total expenditure in excess of the appropriation made by the Board of Trustees. In the accounts of the past year, the expenditures exceed the appropriation only in a single instance. At the May meet-

ing the Board appropriated from the proceeds of Farm Woodlands a certain sum for the erection of a creamery. They also authorized the use of a portion of the lumber belonging to that account in repairing the College barn. The remainder of the lumber, together with the wood belonging to the account, was disposed of for \$813.39. The expense of cutting and hauling wood, and cutting, hauling and sawing lumber, amounted to \$567.11; leaving a balance, \$246.28, available for paying bills incurred in building the creamery. This balance was so applied. The expense of building the creamery was \$358.81. The bills against it were all paid under the supposition that the balance in Farm Woodland account, would be sufficient to cover them. The balance being only \$246.28, and the bills amounting to \$358.81, the account shows an overdraft of \$112.53.

It is also required of the Board of Audit that they make a monthly examination of the books and vouchers of the Treasurer. In accordance with this requirement, I have made a thorough examination of the Treasurer's accounts. I have examined each voucher to see that it was properly audited and correctly entered in the day-book. I have compared the receipt book with the cash book, and added the debit and credit sides of the cash account. I have also taken note that the different accounts were closed into their proper funds. By comparison of balances, and by the various means resorted to in book-keeping, I have tested the correctness of the Treasurer's books.

I have also kept an account with the Treasurer, debiting him with all cash received from whatever source, and crediting him with all sums paid out on the order of the Board of Audit. At the beginning of the year, there was in the hands of the Treasurer, the sum of \$5,803.76. During the year I have debited him with amounts received from various sources, as follows: From Agent Bassett, proceeds of the sales of Endowment Fund land, \$1,380; from State Treasurer, appropriation for building Horticultural Laboratory, \$2,500; from State Treasurer, appropriation for building new sewer, \$1,472.25; from State Treasurer, interest on warrants, \$38.53; from Agent Bassett, rental on Endowment Fund land, \$31,695.76; from Agent Bassett, proceeds of sales of Contingent Fund land, \$720; from Agent Bassett, rental on Contingent Fund lands, \$2,295.67; from the State Treasurer, interest on the Endowment Fund invested by him, \$6,140.72; from the payment of notes given for stock, etc., purchased of the College, \$320; from interest paid on these notes, \$26.23; from school-book department, amount paid on old debt due Interest Fund, \$98.55; from diplomas sold grad-

uating class, \$120; from the farm, horticultural, boarding and other departments of the College, and from all other sources not hitherto mentioned, the sum of \$20,576.17, making with the balance on hand at the commencement of the fiscal year, a total charge against the Treasurer of \$73,187.64. I have credited the Treasurer with bills paid by him on the order of the Board of Audit to the amount of \$67,422.25, leaving as the cash balance in his hands at the close of the fiscal year, the sum of \$5,765.39. Of this amount, \$720 is to the credit of the Contingent Principal Fund, and \$798.13 to the credit of the boarding department, leaving \$4,247.26 to the credit of the College funds, subject to appropriation by the Board.

As a result of my examinations, I am able to certify that all errors in the Treasurer's books have been corrected, and that as they now stand they are correct.

Respectfully submitted,

E. W. STANTON,  
*Secretary Board of Trustees.*

REPORT OF LAND AGENT BASSETT.

*To the Board of Trustees of the Iowa State Agricultural College:*

The following report of the Land Department of the College from October 31, 1877, to October 31, 1879, is hereby submitted for your consideration.

GEORGE W. BASSETT, *Agent.*

INTEREST FUND.

Interest collected month of November, 1877.....	\$ 3,535.11
Interest collected month of December, 1877.....	3,242.59
Interest collected month of January, 1878.....	3,185.52
Interest collected month of February, 1878.....	956.18
Interest collected month of March, 1878.....	1,990.95
Interest collected month of April, 1878 .....	1,523.09
Interest collected month of May, 1878 .....	2,943.77
Interest collected month of June, 1878.....	3,551.72
Interest collected month of July, 1878 .....	3,178.17
Interest collected month of August, 1878 .....	2,234.45
Interest collected month of September, 1878.....	2,118.97
Interest collected month of October, 1878.....	2,624.06
Total.....	\$ 31,024.53
Amount remitted November 22, voucher number 91.....	\$ 1,000.00
Amount remitted November 30, voucher number 92.....	2,590.61
Exchange on October remittance .....	3.50
Amount remitted December 31, voucher number 93 .....	3,239.59
Exchange on November remittances.....	3.00
Amount remitted January 31, voucher number 94 .....	3,182.92
Exchange on December remittances .....	2.00
Amount remitted February 28, voucher number 95 ..	953.38
Exchange on January remittances.....	2.75
Amount remitted March 31, voucher number 96.....	1,990.05
Exchange on February remittances.....	.90
Amount remitted April 30, voucher number 97 .....	1,519.79
Exchange on March remittances .....	3.30
Amount remitted May 31, voucher number 98.....	2,941.77
Exchange on April remittances .....	2.00
Amount remitted June 30, voucher number 99.....	3,548.97
Exchange on May remittances.....	2.75
Amount remitted July 31, voucher number 100 ..	3,174.92
Exchange on June remittances..	3.25
Amount remitted August 31, voucher number 101 .....	2,231.45
Exchange on July remittances.....	3.00
Amount remitted September 30, voucher number 102.....	2,116.97
Exchange on August remittances .....	2.00
Amount remitted October 31, 1878, voucher number 103.....	2,622.06
Exchange on September remittances.....	2.00
	\$31,023.53
By error in October, 1877.....	1.00
Total.....	\$ 31,024.53

Interest collected month of November, 1878 .....	\$ 4,273.54
Interest collected month of December, 1878.....	3,345.95
Interest collected month of January, 1879 .....	4,102.85
Interest collected month of February, 1879.....	1,178.05
Interest collected month of March, 1879.....	1,731.57
Interest collected month of April, 1879.....	1,581.37
Interest collected month of May, 1879.....	1,684.15
Interest collected month of June, 1879.....	2,678.64
Interest collected month of July, 1879 .....	2,774.08
Interest collected month of August, 1879.....	3,187.40
Interest collected month of September, 1879 .....	1,824.00
Interest collected month of October, 1879.....	3,355.71
<b>Total .....</b>	<b>31,722.31</b>

Amount remitted November 30, voucher number 104.....	\$ 4,273.54
Exchange on October remittances .....	2.00
Amount remitted December 31, voucher number 105.....	3,343.95
Exchange on November remittances.....	2.00
Amount remitted January 31, voucher number 106 ...	4,100.35
Exchange on December remittances .....	2.50
Amount remitted February 28, voucher number 107.....	1,174.55
Exchange on January remittances .....	3.50
Amount remitted March 31, voucher number 108.....	1,730.32
Exchange on February remittances.....	1.25
Amount remitted April 30, voucher number 109 .....	1,583.37
Exchange on March remittances.....	1.00
Amount remitted May 31, voucher number 110.....	1,681.20
Exchange on April remittances ....	2.95
Amount remitted June 30, voucher number 111 .....	2,677.04
Exchange on May remittances....	1.00
Amount remitted July 31, voucher number 112 .....	2,771.33
Exchange on June remittances .....	2.75
Amount remitted August 31, voucher number 113.....	3,184.90
Exchange on July remittances.....	2.50
Amount remitted September 30, voucher number 114.....	1,821.00
Exchange on August remittances .....	3.00
Amount remitted October 31, voucher number 115 .....	3,354.21
Exchange on September remittances.....	1.50
<b>Total .....</b>	<b>31,722.31</b>

## CONTINGENT INTEREST.

Amount collected during month of November, 1877.....	\$ 119.67
Amount collected during month of December, 1877. ....	227.20
Amount collected during month of January, 1878.....	134.40
Amount collected during month of February, 1878.....	153.00
Amount collected during month of March, 1878.....	527.20
Amount collected during month of April, 1878.....	128.00
Amount collected during month of May, 1878.....	134.40
Amount collected during month of June, 1878 .....	316.80
Amount collected during month of July, 1878.....	140.80
Amount collected during month of August, 1878.....	380.80
Amount collected during month of September, 1878.....	288.00
Amount collected during month of October, 1878.....	118.97
	<b>2,669.84</b>



Amount remitted November 30, 1878, voucher number 14 .....	\$ 119.67
Amount remitted December 31, 1879, voucher number 15 .....	227.29
Amount remitted January 31, 1878, voucher number 16.....	134.40
Amount remitted February 28, 1878, voucher number 17 .....	158.60
Amount remitted March 31, 1878, voucher number 18 .....	527.20
Amount remitted April 30, 1878, voucher number 19 .....	128.00
Amount remitted May 31, 1878, voucher number 20 .....	134.40
Amount remitted June 30, 1878, voucher number 21 .....	316.80
Amount remitted July 31, 1878, voucher number 22 .....	140.80
Amount remitted August 31, 1878, voucher number 23 .....	380.80
Amount remitted September 30, 1878, voucher number 24.....	288.00
Amount remitted October 31, 1878, voucher number 25.....	118.97
	<hr/>
	2,669.84

Amount collected during month of January, 1879 .....	25.60
Amount collected during month of February, 1879....	310.40
Amount collected during month of March, 1879 .....	368.00
Amount collected during month of April, 1879 .....	371.20
Amount collected during month of May, 1879.....	96.00
Amount collected during month of June, 1879.....	166.40
Amount collected during month of July, 1879 .....	156.80
Amount collected during month of August, 1879.....	460.80
Amount collected during month of September, 1879.....	276.47
Amount collected during month of October, 1879 .....	64.00
	<hr/>
	2,295.67

Amount remitted Jan. 31, 1879, voucher number 26.....	25.60
Amount remitted February 28, 1879, voucher number 27.....	310.40
Amount remitted March 31, 1879, voucher number 28.....	368.00
Amount remitted April 30, 1879, voucher number 29 .....	371.20
Amount remitted May 31, 1879, voucher number 30 .....	96.00
Amount remitted June 30, 1879, voucher number 31.....	166.40
Amount remitted July 31, 1879, voucher number 32.....	156.80
Amount remitted August 31, 1879, voucher number 33 .....	460.80
Amount remitted September 30, 1879, voucher number 34. ....	276.47
Amount remitted October 31, 1879, voucher number 35 .....	64.00
	<hr/>
	2,295.67

## ENDOWMENT FUND.

Collected during month of April, 1878.....	\$ 392.00
Collected during month of May, 1878.....	360.00
Collected during month of June, 1878.....	360.00
Collected during month of July, 1878.....	468.00
Collected during month of January, 1879 .....	180.00
Collected during month of April, 1879.....	1,200.00
	<hr/>
	2,960.00

Remitted to Treasurer April 30, 1878, voucher number 40 .....	392.00
Remitted to Treasurer May 30, 1878, voucher number 41 .....	360.00
Remitted to Treasurer June 30, 1878, voucher number 42.....	360.00
Remitted to Treasurer July 31, 1878, vouchers numbers 43 and 44.....	468.00
Remitted to Treasurer January 31, 1879, voucher number 45.....	180.00
Remitted to Treasurer April 30, 1879, voucher number 46.....	1,200.00
	<hr/>
	2,960.00

## CONTINGENT FUND PRINCIPAL.

Collected during months of January and March, 1878 .....	\$ 1,440.00
Collected during month of May, 1879.....	320.00
Collected during month of June, 1879 .....	400.00
	<hr/>
	2,160.00

Remitted to Treasurer April 31, 1878, voucher number 1 .....	1,440.00
Remitted to Treasurer May 31, 1878, voucher number 2 .....	320.00
Remitted to Treasurer June 30, 1879, voucher number 3.....	400.00
	<hr/>
	2,160.00

I have loaned of the foregoing fund, in conformity with the instructions of the Board of Trustees, the sum of..... 1,800.00

The above loaned for terms of three and five years, at nine per cent annual interest, amply secured, upon improved farming land.

## SUMMARY.

Interest Fund collected November 1, 1877, to October 31, 1878.....	\$31,024.53
Interest Fund collected November 1, 1878, to October 31, 1879.....	81,723 31
Contingent interest collected November 1, 1877, to October 31, 1878.....	2,069.84
Contingent interest collected November 1, 1878, to October 31, 1879.....	2,295.67
Endowment Fund collected November 1, 1877, to October 31, 1879 .....	2,960.00
Contingent Fund Principal collected November 1, 1877, to October 31, 1879.....	2,160.00
	<hr/>
	72,832.35

Exchange upon the above sum is charged to the Interest Fund, as shown in the foregoing statement.

Respectfully submitted,

GEO. W. BASSETT, *Agent.*

**LIST OF IOWA AGRICULTURAL COLLEGE LANDS LEASED FROM NOVEMBER 1, 1877,  
TO NOVEMBER 1, 1879.**

## LIST OF COLLEGE LANDS -CONTINUED.

No. of lease.	PART OF SECTION.	Section.	Township.	Range.	Acres.	Price.	Total value.	NAME OF LESSEE.	DATE.	First payment of interest.	Office fee.
									1878.		
1768	nw qr.....	35	97	27	160	\$4.00	\$640.00	A. L. Hudson....	May 2	\$51.20	\$14.00
1769	ne qr.....	34	97	27	160	4.00	640.00	W. J. Wyman....	May 2	51.20	14.00
1770	sw qr....	14	86	42	160	5.00	800.00	Engeline Towner.....	May 8	64.00	14.00
1771	n hf se qr.....	32	87	45	80	4.00	320.00	John M. Wightman.....	May 11	25.60	14.00
1772	se qr.....	22	98	29	160	5.00	800.00	L. D. Thour.....	May 13	64.00	14.00
1773	nw qr.....	28	93	36	160	4.00	640.00	L. J. Lundemore.....	June 10	51.20	14.00
1774	w hf of e qr.....	34	94	37	80	4.00	320.00	W. J. Evans.....	June 10	25.60	14.00
1775	e hf of sw qr.....	36	87	41	80	4.00	320.00	M. J. Cox.....	June 10	25.60	14.00
1776	se qr.....	22	98	33	160	4.00	640.00	Hans Harrison.....	June 10	51.20	14.00
1777	nw qr.....	30	95	33	161.29	3.50	564.51	M. L. Brown.....	June 10	45.16	14.00
1778	sw qr....	27	95	27	160	3.50	560.00	Philip Dietrick.....	June 11	44.80	14.00
1779	se qr.....	31	95	33	160	4.00	640.00	Henry Sanders.....	June 18	51.20	14.00
1780	ne qr.....	2	98	34	157.77	3.50	552.20	Levat Levatson.....	June 22	44.18	14.00
1781	ne qr.....	12	96	32	160	5.00	800.00	A. M. Bryson.....	June 26	64.00	14.00
1782	nw qr.....	12	96	32	160	5.00	800.00	O. S. Gossard.....	June 26	64.00	14.00
1783	ne qr of ne qr....	12	92	40	40	3.75	150.00	H. C. Blackmer.....	July 9	12.00	14.00
1784	e hf of nw qr.....	4	93	27	97.09	4.00	388.36	James Myer....	July 11	31.06	14.00
1785	sw qr....	34	99	34	160	3.00	480.00	Ole Tallefson....	July 26	38.40	14.00
1786	s hf of ne qr.....	18	87	40	80	4.00	320.00	Joseph Ferguson.....	Aug. 12	25.60	14.00
1787	s hf of se qr.....	22	90	47	80	5.25	420.00	Francis Harvey.....	July 7	33.60	14.00
1788	n hf of nw qr.....	2	87	41	76.77	4.00	307.08	Joseph A. Reed....	Sept. 5	24.57	14.00
1789	w hf se qr.....	23	97	27	80	3.50	280.00	L. B. Clark.....	Sept. 5	22.40	14.00
1790	se qr.....	34	99	34	160	3.00	480.00	Ole Tallefson.....	Sept. 5	38.40	14.00
1791	w hf se qr.....	31	94	37	80	5.00	400.00	Wm. M. Roberts.....	Sept. 20	32.00	14.00
1792	ne qr.....	24	98	34	160	3.00	480.00	Erich Ellingson Alberg..	Sept. 20	38.40	14.00
1793	se qr.....	28	96	36	160	4.00	640.00	George McGregor.....	Oct. 12	51.20	14.00
1794	sw qr of nw qr...	4	98	27	40	4.00	160.00	Joseph Myers (leases '78 and '79)....	Oct. 21	12.80	14.00
1795	s hf of sw qr and s hf of se qr...	9	94	36	160	4.00	640.00	H. D. Evans.....	Nov. 7	51.20	14.00
1796	w hf of se qr and s hf of ne qr...	9	94	36	160	4.00	640.00	Susan K. Evans.....	Nov. 7	51.20	14.00
1797	ne qr.....	4	93	36	175.65	4.00	702.60	Wm. H. Parker.....	Nov. 7	56.20	14.00
1798	sw qr.....	23	94	28	160	4.50	720.00	Etta Parker.....	Nov. 7	57.60	14.00
1799	sw qr....	27	99	31	160	3.50	560.00	Richard T. Jones.....	Nov. 7	44.80	14.00
1800	w hf of nw qr.....	10	86	42	80	5.00	400.00	Patrick Murphy.....	Nov. 18	32.00	14.00
									1879.		
1801	se qr.....	2	94	28	160	4.00	640.00	Andrew Campbell.....	Jan. 2	51.20	14.00
1802	sw qr.....	2	94	28	160	4.00	640.00	Susan E. Campbell.....	Jan. 2	51.20	14.00
1803	sw qr of sw qr....	32	86	44	40	3.00	120.00	W. R. Irish.....	March 18	9.60	14.00
1804	e hf of ne qr.....	32	87	40	80	3.75	300.00	Solomon Nicolls.....	April 28	24.00	14.00
1805	w hf of sw qr....	10	86	42	80	5.00	400.00	John Quigley.....	April 28	32.00	14.00
1806	s hf of nw qr.....	18	97	32	79.25	4.00	317.00	M. L. Brown.....	May 22	25.36	14.00
1807	e hf of se qr.....	4	93	36	80	3.75	300.00	James Miller.....	Aug. 8	24.00	14.00
1808	sw qr.....	10	93	36	160	4.00	640.00	Julia Ann Hemminger..	Sept. 25	51.20	14.00

## ABSTRACT OF LEASES OF LANDS IN "SIOUX CITY PURCHASE."

Total number of acres leased since last Biennial Report, October 31, 1877 .....	18,486.15
Number of acres unleased and now in the market.....	26,475.50

## SETTLEMENT WITH LAND AGENT BASSETT.

## REPORT OF THE SECRETARY.

[SETTLEMENT EXTENDING FROM NOVEMBER 1, 1877, TO NOVEMBER 1, 1879.]

AGRICULTURAL COLLEGE, Nov. 27, 1879.

*To the Honorable Board of Trustees:*

GENTLEMEN:—I beg leave to submit the following report upon my settlement with land agent Bassett for the biennial period beginning November 1, 1877, and ending November 1, 1879.

It will be remembered that I have in my office a complete list of all the land owned by the College, together with the valuation fixed upon the same by the Board of Trustees. The agent is required to account for all this land as either sold, leased, or in the market for lease. (1.) In case of sale, the money received therefrom is forwarded through the College Treasurer to the State Treasurer for investment, and not only must the agent present proper vouchers for the moneys thus collected and forwarded, but the accounts of the three officers must agree. (2.) All land leased, together with the name of the lessee and date of lease, is reported to this office. A strict account is kept with each of these lessees, and the agent is required to transmit monthly to the College Treasurer all interest due and paid on the same. In case of failure to pay on the part of the lessee, the agent is required to declare said lease forfeited, and report the tract to the Board for re-appraisement. (3.) All land not sold or leased is advertised *for lease* by the agent. Printed lists of the lands thus advertised are filed in my office. In one of the three ways thus described, the agent has accounted for all the land in his charge during the past two years.

ENDOWMENT FUND LAND.—Of the land included in the Congressional grant, and known upon the books of the College as Endowment Fund land, there was sold during the biennial period, 1,120 acres. The amount received from the sale of said land was \$2,960, which sum was promptly remitted by the Agent to the Treasurer of the College.

From the rental on leases of Endowment Fund land, the Agent received during the period covered by this report, as shown by his receipts from number 5,632 to number 6,744 inclusive, and by new sales from number 1,710 to number 1,808 inclusive, the sum of \$62,746.34. At

the beginning of the period, there was due the Agent because of an error in previous settlement, the sum of fifty cents. During the period he paid as exchange on his monthly remittances, the sum of \$57.60. The balance, \$62,746.34, he paid over to the College Treasurer, as shown by his vouchers from number 91 to number 115 inclusive.

**CONTINGENT FUND LAND.**—Of the land purchased with accumulated interest money, and known upon the books of the College as Contingent Fund land, there was sold during the past two years 960 acres. The amount received therefor, \$2,160, was duly forwarded to the College Treasurer.

From the lease of Contingent Fund land the agent received, as shown by his receipts from No. 69 to 146, inclusive, the sum of \$4,965.51. This amount he has forwarded to the College Treasurer, as shown by vouchers from No. 14 to No. 35, inclusive.

**CONTINGENT PRINCIPAL FUND.**—In 1876 there was received from the sale of Contingent Fund land the sum of \$360. During the two years ending November 1, 1879, there was received from the same source, as shown above, the sum of \$2,160, making \$2,520 as the total amount realized from the sale of Contingent Fund land since January 1, 1876. The fund thus derived is designated upon the College books as Contingent Principal Fund. By an order of the Board passed at the meeting held in July, 1878, it was directed that this fund should be loaned on farm mortgages at 9 per cent. G. W. Bassett was appointed agent for effecting said loans. Of the sum to the credit of the fund (\$2,520) he has loaned \$1,800, leaving \$720 not yet loaned. This amount the agent expects to loan during the coming month. No interest has yet been paid on the loans made.

Accompanying this report is a summary of the transactions of the land agency for the two years ending November 1, 1879, taken from the books in my office; also, a statement of the investments made by Agent Bassett of the fund arising from the sale of Contingent Fund land, and a statement of the investments by the State Treasurer of the fund arising from the sale of Endowment Fund land.

Respectfully submitted,

E. W. STANTON,  
*Secretary Board of Trustees.*

## SUMMARY.

The following is a summary of the transactions of the land agency for the two years ending November 1, 1879:

## ENDOWMENT FUND LAND.

Number of acres of Congressional grant.....	204,206.86
Number of acres patented prior to November 1, 1877.....	29,842.00
Number of acres patented from November 1, 1877, to November 1, 1879.....	1,120.00
Total number of acres patented . . . . .	30,962.00
Number of acres under lease.....	147,968.86
Number of acres in market for lease . . . . .	26,275.50
	204,206.86
Amount received from sales of Endowment Fund land prior to November 1, 1877.....	\$ 68,782.87
Amount received from sales from November 1, 1877, to November 1, 1879 . . . . .	2,960.00
Total amount received from sales of Endowment Fund land and transmitted through the College Treasurer to the State Treasurer, for investment.....	71,742.87
Amount of interest on leases of Endowment Fund land collected during year ending November 1, 1878 . . . . .	31,024.03
Amount of interest collected during the year ending November 1, 1879.....	31,722.31
Total during the two years . . . . .	\$ 62,746.34
Balance due Agent, November 1, 1877 . . . . .	\$.50
Amount paid over by Agent to College Treasurer during year ending November 1, 1878 . . . . .	30,992.48
Exchange on same . . . . .	31.06
Amount paid to College Treasurer during year ending November 1, 1879.....	31,696.76
Exchange on same.....	26.55
Total . . . . .	\$62,746.34

## CONTINGENT FUND LAND.

Number of acres purchased with accumulated interest money in 1868.....	15,013.17
Number of acres patented prior to November 1, 1877.....	640.00
Number of acres patented from November 1, 1877, to November 1, 1879.....	900.00
Total number of acres patented. . . . .	1,600.00
Number of acres under lease.....	12,213.17
Number of acres in market for lease . . . . .	1,200.00
	15,013.17
Amount received from sales of Contingent Fund land and paid over to College Treasurer prior to November 1, 1877 . . . . .	\$ 1,440.00
Amount received from sale of land and paid over to College Treasurer from November 1, 1877, to November 1, 1879.....	2,160.00
Total received from sale of Contingent Fund land.....	\$ 3,600.00
Of this amount there was paid back to interest Fund . . . . .	\$ 1,080.00
Set aside as Contingent Principal Fund . . . . .	2,520.00
	\$3,600.00



Amount of interest on leases of Contingent Fund land collected during the year ending November 1, 1878, and paid over to College Treasurer .....	\$ 2,669.84
Amount of interest collected during year ending November 1, 1879, and paid over to the College Treasurer.....	2,295.67
Total for the two years.....	<u>\$4,965.51</u>

Of the amount to the credit of the Contingent Principal Fund, Agent Bassett has loaned \$1,800, as follows :

Loan No. 1—Mr. Carpenter—November 1, 1878, 3 years at 9 per cent .....	\$ 1,500.00
Loan No. 2—Elizabeth Cummins—March 12, 1879, 5 years at 9 per cent.....	300.00
	<u>\$ 1,800.00</u>

Of the sum of \$71,742.87 received from the sale of Endowment Fund land and forwarded to the State Treasurer, there has been invested the sum of \$65,700, leaving a cash balance in his hands on November 1, 1879, of \$6,042.87.

The investments are as follows:

Iowa State bonds, drawing 7 per cent interest ... ..	\$13,000.00
School bonds of the Independent School District of Greenbush, dated August 29, 1876, running ten years, at 10 per cent interest.....	300.00
Bonds of the city of Davenport, dated December 13, 1869, running twenty years, with interest at 6 per cent.....	10,000.00
School bonds of the Independent School District of Woodlawn, dated October 1, 1876, running ten years, at 10 per cent interest .....	600.00
School bonds of the Independent School District of Milford, dated August 20, 1876, running ten years, at 10 per cent interest .....	2,500.00
School bonds of the Independent School District of Lucas, dated September 1, 1876, running six years, at 10 per cent interest.....	1,500.00
Bonds of Winnebago county, dated December 1, 1878, running twenty years, with interest at 8 per cent .....	5,600.00
School bonds of the Independent School District of Maquoketa, dated April 7, 1879, running ten years, at 8 per cent interest.....	2,000.00
School bonds of the Independent School District of Des Moines (East Side), dated May 1, 1879, running ten years, at 7 per cent interest.....	1,500.00
School bonds of the Independent School District of Ankeney, dated June 2, 1879, running ten years, at 7 per cent interest.....	100.00
School bonds of the Independent School District of Chariton, dated June 2, 1879, running ten years, at 7 per cent interest.....	5,500.00
School bonds of the Independent School District of Des Moines (East Side), dated May 1, 1879, running ten years, at 7 per cent interest .....	9,000.00
School bonds of the Independent School District of Ankeney, dated June 2, 1879, running ten years, at 7 per cent interest.....	100.00
School bonds of the Independent School District of Miles, dated July 1, 1879, running ten years, at 7 per cent interest.....	4,000.00
School bonds of the Independent School Districts of Stanwood, Perry and Mt. Ayr, dated respectively August 5, May 1 and September 1, 1879, all running ten years, at 7 per cent interest; amount of each, in order, \$3,000, \$2,000, \$5,000; total.....	10,000.00
Cash on hand.....	6,042.87
Total.....	<u>\$71,742.87</u>

## ABSTRACT OF THE PROCEEDINGS OF THE BOARD OF TRUSTEES.

### MEMBERS OF THE BOARD.

THE HON. BUEL SHERMAN, Fredricksburgh,	-	-	1880.
THE HON. G. H. WRIGHT, Sioux City,	-	-	1880.
THE HON. JOHN N. DIXON, Oskaloosa,	-	-	1882.
THE HON. H. G. LITTLE, Grinnell,	-	-	1882.
THE HON. WILLIAM McCLINTOCK, West Union,	-		1882.

### PROCEEDINGS FOR 1878.

During the year the following meetings were held:

<i>First meeting,</i>	-	-	-	-	-	-	-	May 21-24	.
<i>Second meeting,</i>	-	-	-	-	-	-	-	July 23-26	
<i>Third meeting</i>	-	-	-	-	-	-	-	November 9-13	
<i>Fourth meeting,</i>	-	-	-	-	-	-	-	December 3-11	

The Board organized at the May meeting with the following officers:

THE HON. JOHN N. DIXON, Oskaloosa,	-	-	CHAIRMAN.
E. W. STANTON, Ames,	-	-	<i>Secretary.</i>
W. D. LUCAS, Ames,	-	-	<i>Treasurer.</i>
J. L. GEDDES, Ames,	-	-	<i>Deputy Treasurer.</i>

The following Standing Committees were appointed:

*Executive Committee*—Trustees WRIGHT, LITTLE, and McCLINTOCK.

*Committee on Farm*—Trustees LITTLE, McCLINTOCK, and SHERMAN.

*Committee on Horticulture*—Trustees SHERMAN, DIXON, and WRIGHT.

*Committee on Workshop*—Trustees WRIGHT and McCLINTOCK.

*Committee on Forfeited Lands*—Trustees WRIGHT and SHERMAN.

## APPROPRIATIONS OF THE SEVENTEENTH GENERAL ASSEMBLY.

The appropriations of the Seventeenth General Assembly for constructing a Sewer and Horticultural Laboratory, were not, under the terms of the act making said appropriations, available until January 1, 1879. Under the urgent necessity of the case, the sum necessary to construct the sewer was borrowed by the previous Board, and the sewer completed prior to the Legislative appropriation. By the action of the Legislature it was rendered necessary for the Board to secure an extension of the time for repaying the money thus borrowed until the appropriations made by the State could be drawn from the treasury.

At the meeting in May, 1878, the Board found it important to the success of the system of experiments commenced in the Horticultural Department, that the laboratory designed for the use of that department should be built without the delay of a year, which would be rendered necessary if its erection were postponed until the appropriation made by the State for that purpose was available. The Board decided to build said laboratory during the summer of 1878, and for that purpose borrowed of Prof. J. L. Budd the sum of \$2,500, [the amount of the State appropriation], agreeing to pay him, from the Contingent Fund of the College, interest on said sum at the rate of 8 per cent per annum, from July 1, 1878, until payment by the State Treasurer of the State appropriation.

Professors Budd and Beal, under the authority of the Board made all purchases of material and superintended the construction of the sewer. Trustees Dixon and Sherman, and Prof. J. L. Budd, were appointed a committee to arrange, plan for, and superintend the construction of the Horticultural Laboratory. For detailed statement of the sums expended under these appropriations, see report of these committees.

## COLLEGE APPROPRIATIONS.

Upon the recommendation of the Executive Committee, the following additional appropriations were made to meet the expenses of the fiscal year ending November 13, 1878:

## FROM INTEREST FUND:

For Farm Department .....	\$ 1,370.00
For Library.....	175.00
For Ornamental Grounds.....	150.00
For publishing College Quarterly.....	85.00
For purchasing microscope for Horticultural Department.....	40.00
For paying eminent men from different portions of the State for conducting Sabbath exercises in College chapel .....	100.00

**FROM CONTINGENT FUND:**

Expenses of A. S. Welch, at Des Moines, in service of College.....	25.00
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**FROM DONATION FUND:**

Salary of G. W. Bassett, as Agent from May 13, 1878, to November 13, 1878 .....	37.50
Expenses of E. W. Stanton making settlement with Agent Bassett.....	6.79
Expenses of J. L. Budd, at Des Moines, in service of College.....	45.60

The appropriations hitherto made were reduced as follows:

Appropriation to College workshop, from .....	\$ 600.00 to \$150.00
Appropriation to Civil Engineering, from.....	200.00 to 150.00
Appropriation for contingent expenses, from .....	2,000.00 to 1,600.00

The following sums, or so much thereof as might be necessary, were appropriated from the funds mentioned to meet the expenses for the fiscal year ending November 12, 1879:

**FROM INTEREST FUND:**

For salaries.....	\$26,000.00
For fires and lights .....	2,000.00
For contingent expenses.....	1,500.00
For Farm Department—	
For purchasing cows .....	1,200.00
For purchasing creamery apparatus .....	200.00
For purchasing Holstein cattle.....	500.00
For purchasing bull, "Oneida Prince," .....	300.00
For current expenses .....	1,000.00— 3,500.00
For Department of Horticulture and Forestry.....	1,500.00
For Department of Botany—	
For current expenses .....	275.00
For purchasing microscopes .....	125.00— 400.00
For Department of Entomology .....	250.00
For Department of Veterinary Science....	200.00
For Department of Civil Engineering..	150.00
For Department of Physics.....	225.00
For Department of Military Tactics.....	250.00
For Department of Domestic Economy .....	315.00
For Chemical Laboratory .....	225.00
For Workshop... ..	700.00
For Museum.....	50.00
For Library.....	1,050.00
For Ornamental Grounds .....	500.00
For College Printing Office. ....	150.00
For Farm House Boarding Department ..	30.00
For publishing College Quarterly .....	465.00
For publishing Annual Catalogue .....	150.00
For furnishing Horticultural Laboratory.....	250.00
For furnishing Botanical Laboratory .....	280.00
For building water tank.....	200.00
For purchasing furniture for College building .....	200.00
For conducting Sabbath service in College Chapel.....	300.00

**FROM FARM WOODLAND ACCOUNT:**

For building creamery. ....	300.00
For repairing barn.....	105.00

**FROM DONATION FUND:**

For building coal house for Horticultural Department.....	60.00
For repairing house occupied by Secretary.....	50.00

**FROM BOILER FUND:**

For repairing house occupied by Secretary.....	100.00
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In addition to the foregoing, there was appropriated to the various departments the proceeds of all sales made by said departments.

[For the amounts expended under these appropriations, see report of the Treasurer.]

It was directed that all appropriations should be expended under the direction of the President upon consultation with the heads of departments in such manner as not to cause even temporary financial embarrassment to the institution.

**OFFICERS.**

At the December meeting, Mrs. Margaret P. Stanton tendered to the Board her resignation as Preceptress and Instructor in French and Mathematics. Her resignation was accepted, to take effect March 1, 1879.

Superintendent Robinson was allowed \$4.00 per week for the year ending March 1, 1879, in full of all claims which he might have against the College because of its failure to furnish him with a house upon the College grounds, as agreed.

The sum of \$200 was voted Professor Wynn for services rendered during the year in conducting Sabbath exercises in the College chapel.

The salaries of the various officers of the College were reduced, on an average, about 11 per cent.

The following is a list of the officers of instruction for the year commencing March 1, 1879, and ending March 1, 1880, with the salary of each as fixed by the Board:

A. S. WELCH, LL. D., PRESIDENT,

Professor of Psychology and Philosophy of Science.  
Salary, \$3,100.

GEN. J. L. GEDDES, PRESIDENT *pro tem.*,

Professor of Military Tactics and Engineering, Steward, and  
Deputy Treasurer.  
Salary, \$1,900.

W. H. WYNN, A. M., PH. D.,

Professor of English Literature.  
Salary, \$1,600.

C. E. BESSEY, M. S.,

Professor of Botany.  
Salary, \$1,600.

A. THOMSON, C. E.,

Professor of Mechanical Engineering and Superintendent of the  
Work-shop.

Salary, \$1,600.

F. E. L. BEAL, B. S.,

Professor of Civil Engineering.

Salary, \$1,600.

T. E. POPE, A. M.,

Professor of Chemistry.

Salary, \$1,600.

M. STALKER, B. S., V. S.,

Professor of Veterinary Science.

Salary, \$1,600.

J. L. BUDD,

Professor of Horticulture.

Salary, \$1,600.

J. K. MACOMBER, B. S.,

Professor of Physics, and Librarian.

Salary, \$1,600.

E. W. STANTON, B. S.,

Professor of Mathematics and Political Economy.

Salary, \$1,600.

MRS. MARY B. WELCH, PRECEPTRESS,

Lecturer on Domestic Economy.

Salary, \$1,100.

J. S. LEE, B. S.,

Assistant Professor of Chemistry.

Salary, \$1,000.

MISS MARTHA SINCLAIR, ASSISTANT PRECEPTRESS,

Instructor in French and English.

Salary, \$700.

T. L. SMITH, B. S.

Foreman in the Work-shop and Teacher in Preparatory Department.

Salary, \$500.

J. C. HLATT,

Superintendent of the Farm.

Salary, \$1,500.

WINIFRED M. DUDLEY, B. S.,

Teacher of Instrumental Music.

G. S. FOX,

Teacher of Vocal Music.

MRS. A. THOMSON,

Housekeeper.

Salary, \$600.

H. D. HARLOW,

Proctor.

Salary, \$624.

In the cases of Gen. Geddes and Mrs. Thomson, it was provided that they should receive, in addition to their salaries, board during the session of school. All of Mrs. Thomson's, and \$600 of the salary of Gen. Geddes, is paid from the receipts of the Boarding Department. Miss Dudley and Professor Fox receive no salary from the College, but are allowed the tuition paid by students in music.

E. W. Stanton was elected Secretary of the Board of Trustees at a salary of \$200 per annum, commencing November 14, 1878. The house formerly occupied by Gen. Geddes was set aside for occupancy by the Secretary, and arrangements made for its repair. It was provided that after being put in good order by the College, the Secretary should, at his own expense, keep it in first class repair.

President Welch informed the Board of his intention to vacate the house occupied by him. It was ordered reserved for the use of the Departments of Botany and Veterinary Science. The President was allowed the use of one page of the *College Quarterly* for three years in payment for everything connected with the house, aside from furniture owned by him.

Prof. J. L. Budd was appointed to act upon the Judiciary Committee, which committee was increased to seven members.

#### LAND DEPARTMENT.

The Secretary of the Board submitted his report upon the annual settlement made by him with Agent Bassett, which was read and ordered spread upon the minutes.

The agent was directed not to allow any lessees of College land to pay the principal of their leases until the expiration of the time for which said leases were made. The holders of leases numbers 141½, 1,190, and 1,191 were, upon application to the Board, allowed to make such payment, provided that in addition to the principal, they should pay to the College one-fourth of the unearned annual interest for the remainder of the term of said leases.

The committee appointed to re-appraise forfeited land, reported the following tracts re-appraised during the year:

*Endowment Fund Land Forfeited January 8, 1878.*

PART OF SECTION.	Section.	Township.	Range.	Acres.	Old price.	Reappraisal.
sw qr	26	98	33	160	\$2 25	\$4 00
ne qr	12	98	32	160	2 25	5 00
nw qr	12	98	32	160	2 25	5 00
ne qr of ne qr	12	92	40	40	3 75	3 75
sw qr	26	90	24	160	4 50	4 50
se qr	2		4	160	4 50	4 50
ne qr	1		12	160	3 75	3 75
ne qr	3		12	160	4 00	5 00
nw qr	3		11	160	4 00	4 00
nw qr	1		12	160	3 75	5 00
sw qr	1		12	160	3 75	5 00
ne qr	2		4	160	2 50	3 00
nw qr	2		4	160	2 50	3 00
ne qr	2		4	160	3 00	3 00
ne qr	1		10	160	3 75	4 00
se qr	3		12	160	4 00	5 00
ne qr	2		13	160	3 50	4 00
nw qr	2		13	160	3 50	4 00
se qr	2		13	160	3 50	4 00
sw qr	2		13	160	3 50	4 00
sw qr	2		13	160	3 50	4 00
sw qr	2		13	160	5 50	5 50

*Endowment Fund Land Forfeited May 13, 1878.*

nw qr	22	98	29	160	1 50	4 00
ne qr	13	95	27	160	3 00	5 00
nw qr	13	95	27	160	3 00	5 00
nw qr	30	95	33	161.29	2 25	3 50
ne qr	30	95	33	160	2 25	3 50

*Endowment Fund Land Forfeited July 22, 1878.*

sw qr	34	98	29	160	2 25	4 00
ne qr	1	98	30	168.05	2 25	4 00
ne qr	28	93	36	160	5 00	5 00
sw qr	34	95	27	160	4 00	4 00



*Endowment Fund Land Forfeited November 21, 1878.*

PART OF SECTION.	Section.	Township.	Range.	Acres.	Old price.	Reappraisal.
nw qr.....	8	99	34	160	2 25	3 50
ne qr.....	8	99	34	160	2 25	3 50
se qr.....	10	91	40	160	3 75	5 00
nw qr.....	10	93	38	160	3 00	4 00
sw qr.....	10	93	38	160	3 00	4 00
ne qr.....	3		34	160	3 50	5 00
ne qr.....	3		27	160	3 00	4 00
ne qr.....	3		27	160	4 00	4 00
sw qr.....	2		34	160	3 00	3 50
sw qr.....			32	160	3 00	3 50
s hf of nw qr.....	1		32	79.25	4 00	4 00
se qr.....	2		34	160	3 00	3 50
se qr.....			30	160	6 00	6 00
sw qr.....	3		32	159.69	3 50	3 50
w hf of se qr.....	3		38	80	3 50	3 50
ne qr.....			39	160	4 00	4 00
sw qr.....	1		27	160	3 00	3 00

*Contingent Fund Land Forfeited November 21, 1878.*

ne qr.....	38	90	41	160	2 25	2 25
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The committee reduced the valuation on the following tracts to-wit.: sw. qr. of 22, 97, 30, from \$4.00 to \$2.55 per acre; ne. qr. of 28, 99, 38, from \$5.00 to \$4.00 per acre, the same being the appraisement of said lands at the date of forfeiture. These reductions were made upon the petition of the former lessees of said tracts setting forth that their leases had become delinquent and been forfeited; the one by an oversight, the other on account of losses by the grasshopper visitation. The committee also reduced the valuation on the s. hf. of se. qr. 22, 90, 47, from \$7.50 to \$5.25 per acre—Mr. Wm. B. Treadway, former member of the committee on forfeited lands certifying that the committee were mistaken in the tract of land when the first named valuation was fixed upon it.

## CONTINGENT PRINCIPAL FUND.

It was decided by the Board to loan the money arising from the sale of Contingent Fund land on farm mortgages bearing 9 per cent annual interest. G. W. Bassett, of Fort Dodge, Iowa, was appointed the agent of the College to negotiate said loans, under the following contract:

## CONTRACT WITH G. W. BASSETT.

This agreement made this 24th day of July, 1878, between the Iowa Agricultural College and Farm, represented by the Board of Trustees, and George W. Bassett, of Fort Dodge, Iowa, *Witnesseth*: That said Bassett is hereby appointed agent of said College for the purpose of loaning the money now in the hands of the Treasurer of said College, and that may hereafter come into his hands, derived from the sale of the lands purchased by J. C. Cusey, with accumulated interest fund, and located in the Sioux City land district.

The terms of such leases shall be as follows:

(1.) The rate of interest shall be nine (9) per cent per annum, payable annually, both principal and interest payable at the office of said agent at Fort Dodge, with current rate of exchange upon New York or Chicago. The time for which said loans may be made shall not be less than five years, and the amount not exceeding two thousand (\$2,000) dollars in any one loan, unless said amount shall be increased by a further order of this Board.

(2.) Said loans shall be secured by a mortgage upon improved farm lands, the actual cash value of which, exclusive of buildings, shall not be less than double the amount of the sum loaned. The borrower shall keep the buildings upon the mortgaged premises insured for the benefit of the said Iowa Agricultural College and Farm, and shall pay all taxes that may be assessed on such premises, and an attorney's fee in case of foreclosure.

Said Bassett shall also receive, at his office in Fort Dodge, the annual interest accruing from loans made by him, and also the principal sums as they fall due, and shall remit the same to the Treasurer of said College, monthly, and shall also make monthly reports to the Secretary of said Board of Trustees, setting forth in detail the collections so made; said Bassett shall also provide for his own use, the blanks necessary for such loans, it being the intent of this contract that said agency shall be conducted without expense to said College.

In consideration of said services and expenses, said Bassett is hereby authorized to charge and collect from the borrower a commission of five per cent upon the amount of such loan, payable at the time said loan is made, and also all costs incurred in procuring abstracts and in the preparation, execution and recording of all necessary instruments of conveyance.

The authority to loan said fund may be revoked by the Board of

Trustees at any time upon notice given to said agent, but it shall be the duty of said agent to receive and remit to the Treasurer of said College the annual interest, and the principal of all loans then made, and outstanding at the time of such notice.

Said agent shall, before entering upon said duties, file with the Secretary of said Board of Trustees a bond in the penal sum of five thousand dollars, with sureties to be approved by said Secretary, conditioned for the faithful performance of all the requirements of this contract.

Upon filing with the Secretary of said Board of Trustees a note, secured by mortgage properly executed and recorded, together with an abstract of title of the mortgaged premises, the said Secretary shall issue to said Bassett, an order on the Treasurer of said College for the amount of such loan, payable out of said fund, and the Treasurer shall, on presentation of said order, remit the amount thereof to said Bassett at Fort Dodge.

In witness whereof, the said Board of Trustees have caused this instrument to be signed by the chairman of the said Board, and attested by the Secretary of said Board, and the said Bassett has hereunto set his hand the date above written.

J. N. DIXON,  
*Chairman Board of Trustees,*  
E. W. STANTON.  
*Secretary Board of Trustees,*  
GEO. W. BASSETT.

In 1876, a quarter section of Contingent Fund land was sold and the proceeds of the sales, amounting to \$360.00, returned to the Interest Fund. By an order of the Board this amount was transferred to the Contingent Principal Fund, making with the sum of \$1,440 realized from sales made during 1878, a total of \$1,800 to the credit of this fund. At the November meeting, the Board authorized the agent to loan this amount for three years, instead of five, as specified in his contract, provided that he should charge and collect a commission not exceeding three per cent on the loan negotiated.

#### FARM DEPARTMENT.

Trustees Dixon, Sherman and Little, were appointed a committee to secure a Durham bull for the College Farm. Upon the recommendation of this committee, the bull, "Oneida Prince" was purchased of H. B. Adair for the sum of \$300.

Trustees Little and Sherman were appointed a committee to procure for the farm a Merino, and a South-Down buck. The committee purchased a Merino buck of S. H. Thompson, of Johnson county, Iowa, and a South-Down buck of John Wentworth, Chicago, Illinois, paying \$25 for each.

Superintendent Robinson presented his report of the operations upon the farm during the year, which was read and referred to the Committee on Farm.

J. C. Hiatt was elected Farm Superintendent for the ensuing year, with a salary of \$1,500 per annum for self and wife. It was provided:

- (1.) That his services and salary should commence March 1, 1879.
- (2.) That he should be allowed the use of the farm house and the furniture therein, owned by the College, free of rent.
- (3.) That the furniture should be inventoried by Gen. J. L. Geddes on behalf of the College, and that the said J. C. Hiatt should be responsible to the Board for said inventory, but that he should not be required to make good the natural wear of the furniture.
- (4.) That no student should be boarded in said house without the consent of the President of the College.
- (5.) That he should board the employes of the College Farm at the rate of \$3 per week for each boarder.
- (6.) That in all other cases he should be allowed to charge such reasonable rates as he and the parties seeking board might agree upon.
- (7.) That he should be allowed the use of the vegetable garden connected with the farm house boarding department, free of rent.
- (8.) That he should be allowed the privilege of keeping a horse for his own use upon the College farm, free of expense to himself.
- (9.) That he should be allowed wood in the timber, needed in connection with the running of the house.

Messrs. Dixon, Robinson and Hiatt, were appointed a committee to take an inventory of all property upon the farm—said inventory to be taken prior to March 1, 1879.

J. C. Hiatt, Professor J. L. Budd, and President Welch, were appointed a committee to carefully consider the subject of starting a creamery upon the College Farm. The committee reporting favorably, it was decided to establish the creamery and place it under the charge of Superintendent Hiatt. The sum of \$500 was appropriated from the Interest Fund to purchase apparatus, and \$1,200 from the same fund to procure the necessary cows for the farm.

Trustee Little was appointed a committee to visit the farm when Mr. Hiatt, the newly elected Superintendent, should take possession.

#### COLLEGE TREASURER.

The Deputy Treasurer submitted to the Board his report of the financial transactions connected with the Treasurer's office for the fiscal year ending November 13, 1878. This report was read and referred to the Executive Committee. [For report, see page 22.]

The report of the Secretary in regard to the account kept by him with the Treasurer, and the monthly examinations of the Treasurer's books and vouchers, made by the Board of Audit, was read and ordered spread upon the minutes. [For report, see page 34.]

The Executive Committee spent several days in examining the books and vouchers of the Treasurer. The committee submitted the following report, which was adopted:

#### REPORT OF THE EXECUTIVE COMMITTEE.

##### *To the Board of Trustees:*

The Executive Committee, to whom was referred the report of the Treasurer, for the fiscal year ending November 13, 1878, beg leave to report as follows:

In addition to the monthly examinations of the accounts of the Treasurer by the Secretary of the Board of Trustees, we have ourselves examined the various items which go to make up the cash transactions of the year. In the course of this examination we have compared the duplicate receipts filed in the office of the Secretary with the debit entries in the Treasurer's cash account. We have examined each voucher and taken note that it was correctly entered in the day-book. We find that the Treasurer has debited himself with all cash received, and that he has proper vouchers for all sums which he claims to have paid out. In voucher number 1,434, we find that the Treasurer has failed to give himself a sufficient credit, having entered the same in his cash book as \$7.22, when it should be \$7.62. With this exception, the cash account is correct.

At the beginning of the fiscal year, there was in the hands of the Treasurer a balance from the previous year of \$184.65. During the year, he has received from all sources the sum of \$65,965.28. During the same time he has paid out as per vouchers, the sum of \$60,346.17, leaving as the cash balance in his hands at the close of the year, the

sum of \$5,803.76. There has also been received by him and forwarded to the State Treasurer, the sum of \$1,580, the same being the amount collected on Endowment Fund land sold during the year.

Besides examining the cash account of the Treasurer, we have made such further investigation of his books as to satisfy ourselves that each department has received its proper debits and credits; that in no case has the sum expended exceeded the amount appropriated by the Board of Trustees; that all expenditures have been closed into the respective funds from which the appropriations were made; that the accounts of the Treasurer are correct, and his report a true exhibit of the financial operations of the year.

By an order of the previous Board of Trustees, it was directed that the accounts of the School-book Department should not be kept in the Treasurer's books, but that the department should be put under the charge of Gen. Geddes, and a record of the transactions thereof entered in a different set of books. We have also examined the books and vouchers of this department and find them correct.

Your committee would make to the Board the following recommendations concerning the keeping of accounts for the coming year:

(1.) That in the School-book Department, all sales, except to the other College departments, shall be for cash; that the student in charge be required to keep an itemized account, in a book ruled for that purpose, of all sales; and that each student, or any other person making purchases, be required to sign his or her name upon said book opposite the list of things purchased.

(2.) That the Board of Audit require that all reports of the heads of departments, and all bills from whatever source, presented for payment, shall be itemized.

(3.) That the heads of departments, and all others making reports to the Treasurer, be required to make such reports in accordance with the method prescribed by him; and further, that the Treasurer shall so enter said reports in the day-book that ready comparison can be made, both by items and by totals, between the day-book and the report.

(4.) That the heads of the different departments be required to prepare their monthly reports, and to hold a formal meeting in the President's office, the President presiding, on the evening of the third day of the month following, or at such other time as the President may designate, for the purpose of comparing said reports and determining the correctness of the charges made by the various departments against each other, and individuals, and that any negligence upon the part of

the heads of the departments in regard to these meetings, be reported by the President to the Board of Trustees.

(5.) That no money belonging to any department of this College shall be paid to the Treasurer, except by the head of the department to which said money is due and that the party making such payment be required to present to the Treasurer at the time of payment, an itemized statement of the sales from which said cash was derived with the dates of each transaction; that the Treasurer file said statement with the Secretary of the Board of Trustees; and further, that each head of a department keep in his books a cash account, of which this monthly statement shall be a copy.

(6.) Your committee deem it important, in order that the Board of Trustees may rightly discharge their duty of making appropriations to the different departments, and of otherwise providing for the maintenance and welfare of the College, that they should at all times be able to obtain in the office of the Secretary of the Board, full information in regard to the condition of all the College funds. To this end they would recommend that the Treasurer of State be respectfully requested to make to the Secretary of the Board quarterly statements of the condition of the Endowment Fund, invested by him, giving an itemized account of all transactions connected with the original fund, or the collection of interest accruing thereon—one of which statements shall be made on the second Wednesday in November, the close of the fiscal year of the College.

Respectfully submitted,

GEO. H. WRIGHT.  
WM. MCCLINTOCK.  
H. G. LITTLE.

Wm. D. Lucas was re-elected Treasurer, at a salary of \$400 per annum, said salary to commence November 14, 1878. The Treasurer was directed to force collection upon overdue notes in favor of the College in all cases where, in his opinion, collections could be made.

#### MATTERS RELATING TO STUDENTS.

At the commencement of the College, in November, the following students were graduated:

*In the Course in Sciences related to Agriculture.*—Richard Burke, Harvey L. Glenn, A. Elza Griffith, Julius C. Hainer, David McKinnon,



J. N. Muncey, W. Keltner Robbins, J. W. Whitney and Thomas F. Lee.

*In the Course in Science for Ladies.*—Florence E. Brown, Emma McHenry, Ellen Rice, Lucy Shepard, Ida Twitchell and Belle Woods.

*In the Course in Civil Engineering.*—Milan M. Hitchcock, Charles B. Martin, Charles F. Mount, E. G. Tyler and Geo. W. Wilson.

*In the Course in Mechanical Engineering.*—Joseph C. Meredith.

Upon students graduating in the “Course in Sciences related to Agriculture,” or the “Ladies’ Course in Science,” there was conferred the degree of Bachelor of Science (B. S.) Upon students graduating in the “Course in Civil Engineering,” there was conferred the degree of Bachelor of Civil Engineering (B. C. E.); and upon the student graduating in the “Course in Mechanical Engineering,” there was conferred the degree of Bachelor of Mechanical Engineering (B. M. E.)

The charges against students for the school year of 1879, were fixed as follows:

Board, per week .....	\$2.50
Lighting and heating, per week.....	.40
Incidentals, per week .....	.21
Room rent, per term .....	1.00 to 3.50
Washing, average per dozen .....	.50
Janitor’s fee, for students not boarding in the building, per term.....	5.00

The various changes in the courses of study and laws for the government of the institution, recommended by the Faculty, were, with slight modifications, adopted by the Board.

MILEAGE AND PER DIEM.

The following is the mileage and per diem of the different members for the year:

NAMES.	No. of meetings.	Total No. of miles.	Mileage.	Total No. of days.	Per diem.	Total.
J. N. Dixon .....	4	752	\$37.60	30	\$120.00	\$157.60
Wm. McClintock .....	4	1480	74.00	30	120.00	194.00
Buel Sherman.....	3	1182	59.10	28	104.00	163.10
Geo. H. Wright .....	4	1760	88.00	30	120.00	208.00
H. G. Little .....	4	536	26.80	28	112.00	138.80



PROCEEDINGS OF THE BOARD FOR 1879.

During the year meetings were held as follows:

<i>First meeting,</i>	-	-	-	-	-	-	-	May 21-24
<i>Second meeting,</i>	-	-	-	-	-	-	-	July 22-24
<i>Third meeting,</i>	-	-	-	-	-	-	-	November 8-12
<i>Fourth meeting,</i>	-	-	-	-	-	-	-	November 28-December 4

SCHOOLS.

It was directed that the word "school" should be substituted for "department" in designating the work coming under the different Professors. The course in the Veterinary School was extended one year. Professor Stalker and the President were authorized to arrange the proper studies for said course, and it was provided that the Board would confer a suitable diploma upon students completing the extended course thus establised.

FARM DEPARTMENT.

Superintendent Hiatt submitted his report of the operations upon the farm for 1879, which was read and referred to the Committee on Farm.

Trustee Sherman, of the committee to purchase Holstein cattle for the College Farm, reported that he had bought of Dr. Joseph Tafft, of Elgin, Illinois, one four-year old cow, paying therefor the sum of \$300. He also procured from Dexter Revery, of Leland, Illinois, a yearling bull, at a final cost to the College, of \$156.

The Farm Superintendent was authorized to sell the scales owned by the Farm Department and purchase a new set if the funds to the credit of the department would warrant such expenditure.

It was ordered that the Farm Department furnish the Horticultural Department with a team, when wanted, at a reasonable compensation, and that the latter department give the former due notice of its intention to use said team.

Arrangements were made by the Board with Professor Knapp, to occupy the farm house upon the following conditions:

- (1.) That he should be allowed the use of the house and the furniture therein free of rent for one year, commencing March 1, 1880.
- (2.) That the furniture should be inventoried by Gen. J. L. Geddes,

on behalf of the Board of Trustees, and that the said S. A. Knapp should be responsible to the College for said inventory.

(3.) That he should not be required to make good the natural wear of the furniture, but that in no case would the College purchase further furniture for the said house.

(4.) That he should be allowed the use of the vegetable garden connected with the farm house, free of rent, and be permitted to keep a cow upon the College Farm upon payment of an equitable consideration for her keeping.

(5.) That he should be allowed to furnish the extra horse required upon the farm, and in consideration therefor, be permitted to use the same for private purposes when not required upon the farm.

(6.) That Mrs. S. A. Knapp be granted the privilege of keeping a boarding-house in connection with said farm house, provided that she accept no students as boarders except upon the consent of the President of the College; that she board the employes of the College Farm at the rate of \$3 per week for each boarder; but that in all other cases she be allowed to charge such reasonable rates as she and the parties seeking board may agree upon.

Professor Knapp was authorized to hire all necessary farm help, upon consultation with the President.

It was ordered, that there be purchased for the Farm ten Poland-China sows, five Berkshire sows and one Poland-China boar; and that Professor Knapp purchase the same for the College, supplying them, as far as possible, from his own herd; the cost of the sows not to exceed \$15 each, but the cost of the boar to be left to his own discretion.

Professor Knapp was empowered to purchase the necessary seeds for his department, the amount so expended not to exceed the sum of \$200, the same to be paid from the appropriation to the Farm.

A contract was made with the College Boarding Department, by which the Farm agrees to furnish that department with milk and butter, for 1880, charging for the milk ten cents per gallon and for the butter twenty cents per pound.

#### LAND DEPARTMENT.

Mr. Bassett submitted a detailed statement of the transactions of his agency for the two years ending November 1, 1879, which was ordered spread upon the minutes. [For report, see page 37.]

Upon the question of allowing the lessees of Endowment Fund land

to make payment of purchase money prior to the expiration of lease, it was ordered:

(1.) That any persons holding leases or renewals of leases issued prior to the 28th day of March, 1874, upon the lands belonging to the Iowa Agricultural College and included in the Congressional land grant, be permitted to exercise the right of purchase as provided in said leases, upon payment to the agent of said Board of the purchase price of said land and one-fourth of the unearned annual interest for the remainder of the term of such leases.

(2.) That the holders of leases issued subsequent to the aforesaid date, be not allowed to purchase said land until the expiration of their leases.

The committee on Forfeited Lands, reported the following tracts re-appraised during the year:

*Endowment Fund Land forfeited March 15, 1879.*

PART OF SECTION.	Section.	Township.	Range.	Acres.	Old price.	Reappraise- ment.
ne qr	22	9		60	\$2.25	\$4.00
sw qr	20	9		60	3.75	5.00
nw qr	20	9		60	3.75	5.00
se qr	2	9		60	2.25	3.50
nw qr	1	9		75.56	2.70	4.00
se qr	18	9		60	5.00	5.00
ne qr	10	9		60	4.00	4.00
se qr	2	8		60	4.00	4.00
se qr	6	8		60	4.00	4.00
se qr	12	8		60	4.00	4.00
nw qr	33	9		60	3.00	3.00
ne qr	2	9		67.27	3.00	3.00
se qr	4	9		60	3.00	3.00
sw qr	4	9		60	3.00	3.00
sw qr	3	9		60	3.00	3.00

*Endowment Fund Land forfeited November 17, 1879.*

nw qr .....	28	99 23 160	\$2.25	\$5.00
rw qr .....	13	94 28 160	2.62½	4.00
se qr .....	3	98 29 160	2.25	3.50
ne qr .....	26	90 24 160	4.60	6.10
n hf of ne qr .....	2		5.00	6.50
nw qr .....	3		4.00	4.00
nw qr .....	3		4.00	4.00
se qr .....	3		4.00	4.10
sw qr .....	3		4.00	4.00
se qr .....			3.50	3.50
sw qr .....	1		3.50	3.50
nw qr .....	3		4.00	5.00
ne qr .....	2		3.50	3.50
se qr .....	2		3.50	3.56

*Contingent Fund Land forfeited March 15, 1879.*

sw qr .....	26	93 36 160	\$2.50	\$5.00
se qr .....	26	93 36 160	2.50	5.00

*Contingent Fund Land forfeited November 17, 1879.*

sw qr .....	26	93 36 160	\$2.50	\$5.00
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Of the land purchased with accumulated interest money in 1868, there was sold in 1870 and 1871, four hundred and eighty acres. The proceeds of these sales, amounting to \$1,040, were credited on the College books to Interest Fund. By an order of the Board, this amount was transferred to Contingent Principal Fund.

## OFFICERS.

The President was authorized to employ Mr. Frank W. Booth, as foreman in the printing office and teacher in the College during such portion of the year, 1878, as the interests of the College should require, allowing him \$3 per day as compensation for such service.

A. B. Shaw was elected foreman of the printing office for 1880, at a rate of compensation not to exceed thirty cents per hour. The payment of said compensation was made dependent upon the condition that he should so manage the printing office that neither it nor the *College Quarterly* should exceed the appropriations voted them by the Board of Trustees.

Mr. Charles F. Mount was employed by the President as assistant in the Department of Civil Engineering during the fall term of 1879. For this service he was paid the sum of \$135. At the December meet-

ing the Board elected Mr. Mount assistant in Civil Engineering for the year commencing March 1, 1880, at a salary of \$600 per annum.

Mr. Herbert Osborne was elected assistant in Zoology and Entomology, at a salary of \$300 per annum—services and salary to commence November 13, 1879.

The President was authorized to secure an assistant in the Chemical Laboratory, and the sum of \$300 was appropriated for that purpose.

The instruction in Geology was assigned to Professor J. K. Macomber, in addition to his duties as Professor of Physics and College Librarian.

Miss Carrie Lane was appointed First Assistant in the Library, at the usual compensation allowed for such service, and the President was authorized to employ a Second Assistant Librarian, her services not to exceed two hours per day.

Dr. D. S. Fairchild was elected Professor of Histology, Pathology and Therapeutics in the Veterinary School. It was provided that his lectures before that school should be delivered without expense to the College, but that the President and Professor Stalker should be authorized to collect from the students of his classes a fee for his lectures; said fee to be payable at the option of the student. Dr. Fairchild was also chosen College Physician, to serve without compensation from the College. For his services as a member of the Sanitary Committee, there was ordered paid him from Interest Fund the sum of \$50.

The sum of \$100 was appropriated from Interest Fund to be paid Geo. S. Fox for instructing the Military Band and for taking charge of the music on the Sabbath and at all other public exercises of the College during the school year of 1880.

Mrs. Welch, Lecturer on Domestic Economy, was authorized to visit the schools of cookery in New York, Boston and other places for the purpose of studying the best models and most approved appliances for fitting up the Experimental Kitchen connected with the Iowa Agricultural College; her bill of expenses was ordered paid from the appropriation to Domestic Economy.

The salaries of the following officers were increased: Miss Martha Sinclair, Assistant Preceptress and Instructor in French and English, from \$700 to \$1,000 per annum; Mr. T. L. Smith, Foreman in the Workshop and Lecturer on Architecture, from \$500 to \$700 per annum; H. D. Harlow, Proctor, from \$52 to \$62 per month.

E. W. Stanton was re-elected Secretary of the Board of Trustees, at a salary of \$200 per annum, said salary to commence November 13, 1879.

The following is a list of the officers and teachers for 1880, with their salaries as fixed by the Board of Trustees:

A. S. WELCH, LL. D., PRESIDENT,

Professor of Psychology and Philosophy of Science.

Salary, \$3,100. Allowed \$150 for conducting Sabbath exercises.

GEN. J. L. GEDDES, M. Ph., PRESIDENT *pro tem.*,

Professor of Military Tactics and Engineering, Steward and Deputy Treasurer.

Salary, \$1,900.

W. H. WYNN, A. M., Ph. D.,

Professor of English Literature.

Salary, \$1,600.

C. E. BESSEY, M. S., Ph. D.,

Professor of Botany.

Salary, \$1,600.

A. THOMSON, C. E.,

Professor of Mechanical Engineering, and Superintendent of the Workshop.

Salary, \$1,600.

F. E. L. BEAL, B. S.,

Professor of Civil Engineering.

Salary, \$1,600.

T. E. POPE, A. M.,

Professor of Chemistry.

Salary, \$1,600.

M. STALKER, B. S., V. S.,

Professor of Veterinary Science.

Salary, \$1,600.

J. L. BUDD, M. H.

Professor of Horticulture.

Salary, \$1,600.

J. K. MACOMBER, B. S.,

Professor of Physics, and Librarian.

Salary, \$1,600.

E. W. STANTON, B. S.,

Professor of Mathematics and Political Economy, and Secretary of the Board of Trustees.

Salary, \$1,800.

S. A. KNAPP, A. M.,

Professor of Practical and Experimental Agriculture.

Salary, \$1,600. Allowed \$150 for conducting Sabbath exercises.

D. S. FAIRCHILD, M. D.,

Professor of Histology, Pathology and Therapeutics.

Allowed fees collected from students in Veterinary School.

MRS. MARY B. WELCH, PRECEPTRESS,  
Lecturer on Domestic Economy.  
Salary, \$1,100.

MISS MARTHA SINCLAIR, ASSISTANT PRECEPTRESS,  
Instructor in French and English.  
Salary, \$1,000.

T. L. SMITH, B. S.,  
Foreman in the Workshop and Lecturer on Architecture.  
Salary, \$700.

A. B. SHAW, B. S.,  
Foreman and Instructor in the Printing Office.  
Thirty cents per hour for time employed.

C. F. MOUNT, C. E.,  
Assistant in Civil Engineering.  
Salary, \$600.

HERBERT OSBORNE, B. S.  
Assistant in Zoology and Entomology.  
Salary, \$300.

WINIFRED M. DUDLEY, B. S.,  
Teacher of Instrumental Music.  
Allowed the tuition charged students.

G. S. FOX,  
Teacher of Vocal Music.  
Allowed the tuition charged students and \$100 for  
instructing Military Band and taking charge of  
Chapel music.

MRS. A. THOMSON,  
Housekeeper and Assistant in Experimental Kitchen.  
Salary, \$600.

H. D. HARLOW,  
Proctor.  
Salary, \$62 per month.

The salary of the house-keeper, and \$600 of the salary of the Steward, are paid from the receipts of the Boarding Department. Both are allowed board during the school year. A house upon the College grounds is set aside for occupancy by the Secretary of the Board of Trustees; also one for the use of the Superintendent of the workshop.

#### GRADUATION AND DEGREES.

At the commencement of the College in November, the following students were graduated with the usual degrees:

*In the Course in Sciences related to Agriculture.*—George Crary Faville, Thomas Volney Hoggatt, James Edward Hyde, Lewis Logan

Manwaring, John Clemmins Noble, Herbert Osborne, Warren Morey Scott, James Duncan Shearer and James Milton Waugh.

*In the Course in Mechanical Engineering.*—William Graham McConnon, Fremont Turner and Willis Whited.

*In the Course in Civil Engineering.*—Francis A. Field, Frederic Holton Friend and Albert L. Hanson.

*In the Ladies' Course in Science.*—Sylvania Caroline Carter, Malinda Cleaver, Lily May Croy, Jennie Elizabeth McElyea, Genevieve Welch and Alice Whited.

Post-graduate degrees were conferred as follows: The degree of Civil Engineer (C. E.), upon Charles F. Mount; the degree of Master of Philosophy (M. Ph.), upon A. E. Griffith.

Upon the recommendation of the Faculty, the Board conferred the degree of Master of Philosophy (M. Ph.), upon Gen. J. L. Geddes and the degree of Master of Horticulture (M. H.), upon Professor J. L. Budd.

#### MATTERS PERTAINING TO STUDENTS.

It was ordered that, commencing with 1880, all able-bodied students, except the Senior Class and such others as the Faculty may, for good reason, excuse, be required to uniform and drill.

It was directed that the College societies be required to consult the President, and obtain his approval of all arrangements they may make for securing a lecturer for the evening set apart for them in the programme of commencement week, and that said societies be required to pay all the expenses connected with said lecture.

A large number of students having petitioned the Board to provide instruction in Elocution, the matter was referred to the President for such action as he shall deem for the best interests of the College.

#### COLLEGE TREASURER.

The report of the Deputy Treasurer for the year ending November 12, 1879, was read and referred to the Executive Committee. [For report in full, see page 29.]

The report of the Secretary of the Board of Trustees upon the proceedings of the Board of Audit and the monthly examinations made of the Treasurer's books and accounts was read and ordered spread upon the minutes. [For report in full, see page 34.]

The Executive Committee spent several days in examining the books



and vouchers of the Treasurer. As a result of their examination they reported to the Board that they were satisfied that the accounts of the Treasurer were correct.

Mr. Lucas having been elected a member of the Eighteenth General Assembly, was not a candidate for re-election as Treasurer of the College. At the expiration of his term of office, the following resolution was adopted by the Board:

*Resolved*, That at the close of the services of William D. Lucas, as Treasurer of the Agricultural College, this Board tender to him their hearty thanks for the faithfulness and ability with which he has discharged the duties of that important office.

W. M. Greeley, of Ames, was elected Treasurer for the fiscal year, commencing November 13, 1879, at a salary of \$500 per annum.

#### COLLEGE APPROPRIATIONS.

The sum of \$219.53 was appropriated from Interest Fund to Professor J. L. Budd, in payment of interest due January 1, 1879, on money borrowed of him to construct the College Sewer and the Horticultural Laboratory. There was received from the State as interest on the warrants issued for these appropriations, the sum of \$38.53. This amount was also ordered paid to Professor Budd, as part payment of the interest on said loan from January 1, 1879, to the date of the repayment of the money borrowed.

To cover the expenses of the fiscal year commencing November 13, 1879, the following appropriations were made:

#### FROM INTEREST FUND:

For salaries.....	\$25,850.00
For fires and lights .....	1,500.00
For contingent expenses.....	1,500.00
For Farm Department—	
For current expenses .....	\$1,000.00
For purchasing cows and hogs.....	800.00— 1,800.00
For Department of Horticulture and Forestry .....	700.00
For Department of Botany.....	242.50
For Department of Entomology .....	250.00
For Department of Veterinary Science.....	242.50
For Department of Civil Engineering.....	150.00
For Department of Physics .....	225.00
For Department of Military Tactics.....	250.00
For Department of Domestic Economy .....	400.00
For Chemical Laboratory.....	225.00
For Workshop.....	450.00
For Museum .....	100.00
For Library .....	1,050.00

For Ornamental Grounds .....	\$ 300.00
For College Printing Office.....	168.88
For Horticultural Laboratory....	100.00
For publishing College Quarterly.....	400.00
For purchasing case for Musical Department .....	25.00
For payment of Prof. Fox's services instructing Military Band and taking charge of music at public exercises .....	100.00
For payment of Dr. Fairchild's services on Sanitary Committee.....	50.00
For preparing Biennial Report for filing in Governor's Office.....	50.00

In addition to the above, there was appropriated to the different departments the proceeds of sales made by said departments.

#### MILEAGE AND PER DIEM.

The following is the mileage and per diem of the different members for the four meetings held during the year:

NAMES.	No. of meetings.	Total No. of miles.	Mileage.	Total No. of days.	Per diem.	Total.
J. N. Dixon.....	4	804	\$ 40.20	26	\$104.00	\$144.20
Wm. McClintock.....	4	1480	74.00	25	100.00	174.00
Buel Sherman.....	4	1576	78.80	26	104.00	182.80
Geo. H. Wright .....	4	1800	90.00	25	100.00	190.00
H. G. Little.....	4	536	26.80	24	96.00	122.80

E. W. STANTON, *Secretary.*

CONDITION AND OPERATIONS OF THE FARM DEPARTMENT, 1879.

J. C. HIATT, SUPERINTENDENT.

To the Board of Trustees:

GENTLEMEN—In accordance with the law, I hereby submit a report of the management and operations of the Farm Department for the year ending November 12, 1879:

The season has been very dry, but better than the average for crops, and I have raised enough of all kinds of produce to supply the stock for the coming year. The kinds, and the quality of each kind of produce raised, are shown in the following table:

	ACRES.	BU. PER ACRE.	TOTAL.
Corn .....	65	57	3540 bushels
Oats .....	30	45	1350 bushels
Rye .....	23	29	683 bushels
Hay .....			108 tons
Turnips .....	1		60 bushels
Potatoes .....	1 $\frac{1}{3}$		240 bushels
Wheat (experimental) .....	10	14	140 bushels

The quality of everything is good, with the exception of a few varieties of experimental wheat. It will be seen that the yield of sixty-five acres in corn was 3,540 bushels, worth, at twenty-five cents per bushel, \$885. The total cost of raising and putting in the crib was \$521.54, or fourteen cents per bushel, or \$8.02 per acre. If we had raised thirty-two bushels per acre, there would have been no profit; but if we had raised eighty bushels, which ought to be the minimum with favorable seasons, when we get the land in the high state of cultivation necessary to successful farming, then our corn would cost only ten cents per bushel, giving the good farmer a profit of fifteen cents per bushel, where the average farmer hardly gets pay for his labor.

The season was too dry for a good yield of oats. The seed on hand being mixed, no pure varieties could be sown. Thirty acres pro-

duced one thousand three hundred and fifty bushels, or forty-five bushels per acre, worth at twenty cents, \$270. The total cost of raising was \$163.43, or twelve cents per bushel, nearly \$6 per acre. Thirty bushels per acre would pay for raising, and sixty bushels would make a nice profit of \$6 per acre

Superintendent Robinson seeded twenty-three acres to rye, part of which was injured by being flooded last fall. The yield was six hundred and eighty-three bushels; about thirty bushels per acre, worth forty cents per bushel, or \$273.20. The cost was \$147.90, or twenty-one cents per bushel, leaving a profit of \$125.30, to which should be added fall and spring pasturage.

Several pieces of land, amounting in all to ten acres, were devoted to experiments in wheat. The soil varied from a dark to a light sandy loam. The seed was sown broadcast and the ground harrowed and rolled until it was in very fine condition. The varieties sown were Minnesota White Fife, Scotch Fife, Improved Fife, Lost Nation, Golden Globe and White Russian. On the third day of May, I scattered four hundred pounds of salt on one acre; on another, four hundred pounds of gypsum. Again, on the sixteenth day of June, I scattered three hundred pounds of salt on another acre. My records show that on that day all the varieties were badly rusted, and there was very little difference in the appearance of any of the plats, those receiving the salt and gypsum being a shade darker than the others. At about the middle of July, the chinch-bug appeared, and seemed to rather like his wheat salted. A small piece of fall wheat also was badly injured by rust.

The total yield of wheat was one hundred and forty-one bushels, valued at \$137.39—cost, \$76.37. I would not recommend any of the varieties tried this year, though the Scotch or improved Fife, for hard wheat, and the Golden Globe, for soft wheat, did better than any of the other varieties tried. We are making an effort to introduce several varieties of the Russian wheat and oats, hoping to find something adapted to our soil and climate. The past two seasons have been favorable to the growth of fall wheat, but I have little faith in any known variety being grown with certainty, when we have our cold, dry winters. Besides, very few farmers have their farms divided into fields so that the stock can be kept from injuring the wheat in the fall and spring, when it is tender. Another difficulty is, to secure a proper rotation of crops.

The total number of cattle is one hundred and one. All have been healthy and have done well. Not one has died. Fifty-two calves were dropped, and all were saved but one. I have kept thirty-five of the best calves, viz.: twenty-seven Grades, seven Short-Horns and one Holstein.

The herd of thorough-bred Short-Horns consists of two bulls, twelve cows and heifers and seven calves—twenty-one in all. This number will be reduced to about fifteen. Only the best animals of the best families will be kept, not for the purpose of raising fancy stock, but that we may have good specimens for the use of classes in stock-breeding, and that we may have a few well bred animals to sell to the patrons of the College, and others, at reasonable prices. This year, the demand has greatly exceeded our supply. All found ready sale; calves nine to twelve months old, \$100; younger ones, \$60 to \$75 each.

#### HOLSTEINS.

These cattle are comparatively little known in the West; only a limited number having been imported from North Holland. They are large and well formed, but not as fine as the Short-Horns; color, jet black, and clear white. They have a great reputation for milk, though perhaps, more on account of quantity than quality. Their milk is not so rich as that of the Jersey, but the yield being so much greater, it is believed by many that they will be more profitable, even for butter. Their calves are large, and make very superior veals. The Trustees purchased a four-year-old cow and a yearling bull, of this breed, for the purpose of starting a small herd on the College Farm. The cow raised a very fine calf, and the bull has been used on a number of our grade cows, hoping to improve our dairy stock.

Only one thorough-bred Jersey, one Devon, and two Ayrshire cows remain on the farm. It would be advisable to purchase two or three good Jersey cows and a bull, but the Devon and Ayrshires need only be kept as specimens for the class in stock-breeding.

We have on the farm, seven head of work horses—two geldings and five mares; also two young mares and three colts. One team is used by the Horticultural Department. Most of the horses are old, and should be sold and two good young teams be purchased. The Horticultural and Experimental Departments ought to have teams of their own.

We have seventy-five head of sheep in all; twenty-five selected South-down ewes, twenty-five selected Merino ewes, two Cotswold

ewes, ten South-Down bucks, five Merino bucks, and eight wethers. The wool clip this year, averaged seven pounds per head, and was sold for twenty cents per pound; the Merinos averaged about nine pounds and the South-Downs about four and a half pounds, but the South-Down wool was worth four cents per pound more in the market.

On account of the prevalence of the cholera among the swine on the College Farm last year, I thought it best not to purchase any valuable animals. Seven hogs died soon after the first of March, but since that time, all have been healthy. Not many pigs were raised. The males were mostly sold for breeding purposes, and the best sows kept for our own use. Only pure bred Poland-China and Berkshires are kept. We stand in great need of a good hog-house.

#### CREAMERY.

Since the first of March, a neat and convenient creamery building, sixteen by twenty-four feet, has been erected without cost to the State. All the necessary apparatus, including an engine and boiler, churn, butter-worker, Cooley creamer, milk-vat, cans, buckets, etc., have been supplied at a cost of \$379.50. We have furnished all the milk and made nearly all the butter used at the College. Some butter had to be purchased, towards the last of the term, at a cost greatly exceeding what we receive for it, or there would have been a small profit over and above all expenses. All the work of milking and butter-making was done by students. About fifty cows were milked, thirty of them raising their calves. Fully one-half of the cows on the farm, are not profitable milkers, and ought to be disposed of as soon as better ones can be supplied. I think the only way to ensure good milkers, is to raise them on the College Farm, and to that end I have saved all the best heifer calves. Fifteen cows should be purchased to replace those sold at the sale.

#### STUDENT LABOR.

I found students willing to work, and many of them efficient hands. Under the present regulations, we are required to furnish each student twelve hours work per week. Now, with one hundred and fifty male students, if all demand their twelve hours, we would have to furnish one thousand eight hundred hours, one hundred and eighty days, or thirty hands each day with work, which would be about twenty more than could be profitably employed. Another disadvantage is that the driver to each team must be changed twenty times each week, a thing that cannot be done with good results. We agree to furnish students

with work, but require no guaranty of them to perform that work when needed; consequently, in time of haying, threshing and corn-husking, we are short of help, while at other times we have a large surplus. This difficulty cannot be wholly obviated without a change in the school year; for, at present, examinations come in the haying season, and Commencement in time of corn-husking. I would recommend that no definite amount of work be guaranteed to students, but that the departments be required to give preference to student labor.

FARM IMPROVEMENTS

Under this head are a great many charges and a very few credits. This year I have built four hundred and twenty rods of new barbed wire fence; rebuilt, out of partly new material, two hundred and sixty rods; also one hundred and fifty-seven rods of extra strong board fence, enclosing a bull pasture, have been constructed—the total cost of all being \$720. For seven hundred and ninety-three loads of manure we charged Farm Improvements, \$125; for lumber and labor on cow-stable, \$150; sheep and butcher sheds, \$63; scales, complete, \$150; ditching, \$47. H. H. Robinson had expended before the first of March, 1879, \$200, mostly for building new fence. The balance of \$293.48 was used in keeping in repair some eight miles of fence, purchasing and sowing grass-seed, cleaning up corners and many other things incidental to keeping up a farm. At least one thousand dollars should be inventoried to the credit of the Farm Improvements.

FINANCIAL STATEMENT.

The following shows the result of the year's work:

	LOSSES.	GAINS.
Corn-field .....		\$363.49
Oat-field.....		106.57
Rye-field .....		125.30
Experimental wheat .....		76.37
Hay-field .....		143.92
Potato-field .....		32.57
Root-field .....		11.75
Teams .....		53.92
Pasture .....		32.40
Farm tools.....	424.11	
Produce .....	288.68	
Creamery .....	74.51	
Farm Improvements.....	1,538.48	
Stock .....		193.51
Increase in inventory.....		715.89
	\$2,325.78	\$1,855.69

Farm Improvements should be credited with \$1,000: the improvements made this year enhancing the value of the farm that amount. Farm tools were inventoried last year \$345.75 too much. This amount should, therefore, be deducted from the loss on farm tools, to give a true showing for this year's work. These changes made, the net profit for the year would be \$875.66. It should be taken into consideration that all the hands have been paid liberal wages, and boarded; and that employment has been given to a large number of students, who, without its aid might not have been able to remain in the institution.

The above is respectfully submitted without further recommendations.

J. C. HATT.

*Farm Superintendent.*



## CONDITION OF THE DEPARTMENT OF HORTICULTURE AND FORESTRY, 1879.

J. L. BUDD, PROFESSOR.

I am pleased to report satisfactory advances in nearly all the divisions of this department.

In my initial report of 1877, an outline was given of proposed lines of improvement and experimentation, and of the imperative wants and needs in the way of buildings and fixtures, which could alone be supplied by the State Legislature.

The prescribed space at this time will be given to a brief statement of the progress we have been enabled to make. All details of minor experiments, descriptive notes on new fruits, speculative comments on modes and methods, etc., will be excluded as more appropriate for the pages of the *College Quarterly*, which is widely circulated in the State.

### HORTICULTURAL BUILDING.

I place this first in the list of desirable attainments for reasons self-evident to practical horticulturists.

When the report of 1877 was written not a single dollar had yet been appropriated by the Legislature for facilities for propagation, storage or class instruction, in this important department. A small, low, wet, rotten-timbered cave, constituted the horticultural headquarters.

At the last session of the Legislature the College Board asked for an appropriation of \$3,500, for the erection of a neat, durable, and sufficiently commodious building for class room, office, seed room, cellars for storage, etc. They also asked for the sum of \$2,500 for the construction of a neat, durable, and ample-sized propagating and plant-house, for the combined use of the Horticultural and Botanical Departments. The total amount *actually* appropriated for these purposes, so virtually important to the State at large, was \$2,500; and this totally inadequate sum was not available, by the special provisions of the Act, until 1879.

As absolutely no progress could be made in the practical work, leading me to take charge of the department with existing lack of facilities, the Board permitted the erection of the building with funds advanced by the writer, and the rooms were in actual and profitable use several months before the appropriation was available.

The Building Committee secured unusually favorable rates for all material and labor used; yet the spreading of so small a sum over so much ground compelled the use of cheap material, the cheapest possible plans of construction, and inconvenient restriction of size of needed rooms. Yet I am happy to state that this tardy and limited appropriation has permitted the accomplishment of much valuable work in experimental horticulture, and has furnished fair facilities for the present horticultural classes.

#### EXPERIMENTAL NURSERY.

The work outlined in this division was the cultivation of varieties of the apple and other fruits, in a systematic way, from northern sections with climatic and soil conditions nearly identical with those of our prairie States.

In this work, I have, in some respects, been far more successful than our most hopeful fruit growers could have expected, with the information we had relative to the fruits of Northern Europe and Asia, two years since.

I am pleased to report that we now have a far greater number of varieties of the apple and pear, which we have reason to believe truly "Iron Clad," than have hitherto been found in our collection in any age, or in any country.

In this work we have received the generous aid of many fruit growers and societies. Especially are we indebted for contributions and favors to Dr. T. H. Haskins, Vermont; Charles Gibb, Abbotsford, Canada; Charles Downing, Peter Barry and Isaac Hicks, New York; Prof. C. S. Sargent and S. W. Williams, of Massachusetts; Hon. Wm. G. Le Duc and William Saunders, Washington; Wm. A. Springer, A. G. Tuttle, J. C. Plumb, and G. P. Pepper, of Wisconsin; Peter M. Gideon, of Minnesota; Hon. Geo. F. Seward, Pekin, China; Dr. E. Regel, St. Petersburg, Russia; and Dr. Arnold, Director of the great Agricultural Institute near Moscow, Russia.

Including the varieties alone quite certain to prove defiant to all our climatic extremes, we now enumerate in nursery over four hundred.

In number, we now have about forty thousand trees, one and two years old, in nursery.

A large portion of the trees have been grown from scions imported from Northern Europe. In making this valuable collection the most careful discrimination has been used as to the size, appearance and character of the fruit.

The future planting of varieties producing small inferior fruit, just because the trees can bid defiance to wind and weather, should be discouraged, unless planted as stocks upon which to top-work better fruit.

The varieties we have in nursery from Vermont, Canada, Wisconsin, Minnesota and local sections of Northern Iowa and Illinois, all have a good record as to character of fruit, as well as hardiness of tree.

The Russian varieties of the apple have not been imported at random. We were especially fortunate, in this matter of intelligent selection, in securing the aid of the Horticultural Manager of the great experimental station at Petrovsk, near Moscow. His selection from the great number of varieties grown in that section, embraces forty-one sorts of winter apples and eighty-four fall and early winter varieties. All these, with seventy-five summer varieties, he forwarded with the assurance that they were, without exception, of good size, appearance, and quality. Several of them are described as sweet, some as sub-acid, and a few as very acid, and only fit for culinary use.

The character of soil and subsoil, the range of summer temperature, and the variability of air as to alternate aridity and humidity of this interior section of Russia, are so nearly identical with ours, that we have every reason to believe that these fruits will vary but little in size, color, or season for use, when grown on the Iowa prairies. As to season of maturity, we have some examples from which we may fairly judge of the prospective behavior of them all. The Oldenburg, Tetofsky, Rannet Red, Borsdorf, and other varieties fruiting in this country correspond in season with the Moscow list.

The varieties we have imported from the nurseries of Dr. Regel, at St. Petersburg, include a number of fall and winter sorts not found in the Moscow list. These varieties do not mature well at St. Petersburg, on account of the short, cool summers. Most of those sent us were secured from the interior sections, farther south, near Kalouga and Simbrisk. In our report two years ago, the following allusion is made to the Russian fruits: "It will be expected that a large portion of these varieties will prove summer and fall apples; but about all of

them will be of fine size, and appearance, and the product of the experimental orchard can be utilized in the College Boarding Department, more especially as all of these northern apples are first-class for culinary purposes. If among them all we get a single half dozen 'Iron Clad' winter varieties, the experiment will prove of inestimable value to the State."

My extended correspondence since that time with fruit growers and scientists of the north of Europe and Asia, has much modified this modest belief as to the value of these fruits. We now have the most indubitable proofs that from two to three hundred miles south of St. Petersburg, and the same distance from the coast line, where the longer, dryer, and warmer summers permit the ripening of winter varieties of the apple, there is no lack of sorts for all seasons and uses. So far from all of the varieties being acid and specially fit for culinary use, quite a large proportion of them are listed as sweet and sub-acid.

We now confidently predict that many of the varieties we have in nursery from this region will prove just what we have been seeking for during many years past, viz: Good keeping sorts, of large size and good quality for different uses, produced on trees capable of enduring any phase of our climate.

A recent letter from Dr. Regel encourages this belief. He states that a few of the varieties sent to the Department of Agriculture in 1870 are winter sorts in their respective localities of that country. In the short list of these which he enumerates he includes at least three which have fruited in Vermont and Wisconsin, viz: Red Queen, Borsdorf and Repka Malenka. All of these are larger in size, better colored, and fully later in season for use than indicated in his list.

The varieties of the pear imported from St. Petersburg and Moscow, now growing in nursery, have attracted much attention. They are all as peculiar in leaf and habit of growth as are the Russian apples. Uniformly the leaves are thick and coriaceous, and growth is vigorous in the early part of the season, without a trace of leaf-blight at any stage of growth. The one year old plants matured their terminal buds as early in autumn, and as perfectly as did the crabs or the Oldenburg. Yet these pears divide into two classes in leaf and habit of growth. One class has the large finely serrated leaves and rampant growth of the Chinese pears. The other has small, thick, crenated leaves, and the slow, short jointed growth of the wild pears of northern European forests. We expect all of them to prove hardy on our prairies, and we expect them to be less subject to blight than the pears we have

tried. The fruit is represented to be of good size, and of excellent quality for culinary use. But we have the direct assurance of Dr. Arnold and others that none of the pears, hardy in the open air of central Russia, are as fine grained and delicious for dessert use as the French and Belgian sorts. Yet we are told that some of those grown in the interior are fair in quality for eating.

We as yet have in nursery only six of the Chinese pears, and these are not from the sections of the great empire leading us to believe them to be entirely hardy with us. Some of them were soft and immature when cold weather set in. But the Chinese sand pear, and two others evidently of the same descent, matured perfectly, and give evidence of hardiness. The sand pear has been fruiting for a number of years in the Eastern States, where it has been notorious for heavy fruiting, and exemption from all traces of leaf or fire blight. If it proves entirely hardy here it will prove more of an acquisition than in sections where a better class of the pear, and the quince, can be profitably grown. Though worthless for eating, its beautiful orange-like fruit has a delicious quince flavor when cooked. In leaf and texture of wood it more nearly resembles the thorn than the pear, and we have reason to believe it will succeed famously on thorn stocks. Its seedlings are now commanding fancy prices at the East on account of the belief that they are blight proof, while producing abundant crops of fruit commanding a good price in the markets.

Some of the Russian pears of the Chinese type of leaf and wood have shown an aptitude for perfect uniting with, and rapid growth, when worked on apple stocks. This season in nursery they seemed to unite better, and to make far better growth on the apple than on pear stocks. Some time must however elapse before we can be sure that the apple will make a suitable stock for any of these northern pears.

We expect to receive consignments of pear scions from northern China, and from central Sweden, the current winter.

We have every reason to believe that in the near future we shall have, as the result of crossing with these northern forms of the pear, hardy blight-proof varieties, producing choice fruit, which will do as well on our prairies as our hardiest apples. In the meantime first-class cooking pears will be a desirable acquisition.

An importation of cherry and plum scions was made from St. Petersburg and from Moscow. But we regret to report that they came in bad condition, and not a single scion has grown. Even in our home nursery work it is known that scions of these fruits are difficult to

manage so as to give uniform success in grafting. We will try to import some small trees of the northern plums and cherries as soon as means at the disposal of the department will permit. It is proper to state in connection that we have made arrangements for the importation of pits of the rather inferior peaches grown in the hilly regions of interior northern China. We have reason to believe they will prove hardy here. If so, they may prove the parent stock of a race of good peaches, far hardier than those from southern Europe.

We are also making such additions to our lists of hardy shrubs, small fruits, conifers, etc., from northern Asia, as our means and opportunities permit, for trial in our rough climate.

Our extended correspondence, of the past two years, impresses the belief that the northern portions of the eastern continent contains many species and varieties of fruits, ornamental and forest trees, shrubs, cereals, grasses, etc., which will prove treasures on our prairies when introduced and disseminated. In this belief we have the support of eminent scientists who have given the subject careful attention. Some of the most promising sections of this vast section, such as northern Bokhara and Ladak, we as yet have no method of reaching.

#### EXPERIMENTAL ORCHARD.

I have been reasonably successful in carrying forward the plans outlined in last report. About one thousand trees have been planted as stocks, mostly Gros Pomier and Duchess. On these have been top-worked the Russian varieties before noted, with a view to careful comparison of relative value and season of fruit. The grafts have uniformly grown well, with the exception of about two hundred trees grafted the past spring just preceding a remarkable south and southwest gale of five days duration, during most of which time the air was nearly as dry as that from the Sahara desert. A large proportion of these will have to be re-grafted next spring.

The orchard will be extended next spring with root-grafted trees from the nursery of many new varieties from the north not yet fruited in the State. Gros Pomier and Duchess trees will also be planted, upon which to top-work half-hardy sorts, such as Jonathan, Grimes' Golden, Dominie, Maiden's Blush, and Rambo, with a view to careful noting of influence of stock upon graft. A part of these stocks will also be top-worked with the seedlings now in nursery, grown from seeds of selected fruits of our best varieties grown in central and northern Iowa.

## THE ORCHARD.

The older orchard, planted with over one hundred varieties common to our nurseries, many of which are far from being hardy in Story county, was in bad condition three years since. It is located in a sheltered position, and the trees had suffered severely with blight and sun-scald of the trunks. The plan has been kept up for three years of plowing the ground lightly about the 20th of June and sowing to buckwheat. Since this treatment has been given not a blighted twig has been seen on any variety in the plat of ten acres. This is worthy of notice in connection with other experiments instituted with a view to testing the results of soil-shading in orchards. Many observations lead to the belief that our intense summer heats have something to do with the general prevalence of apple tree blight on our prairies. Be this as it may, the shading of orchard soils during the latter part of summer with a succulent and cool growth of buckwheat has been repeatedly demonstrated to be favorable to the health and fruitfulness of our orchards.

This orchard is in many respects instructive to our students in Horticulture. The folly of planting varieties unsuited to our soil and climate, is exhibited on every row. At every point a row, or part of a row set with Fameuse, Ben Davis, Gros Pomier, Plumb's Cider, Saxton, Duchess, etc., is usually perfect, and about every tree of the original planting in place. But the many rows of less hardy sorts give every gradation from utter extinction to varied stages of disease and decay.

## SMALL FRUITS.

The vineyard is not, in all respects, creditable to the Institution. Where located the soil is specially porous, and the vines of the original planting, having been planted too near the surface, have been so injured in their roots, in their first stages of growth, that they still seem low in vitality.

About four hundred vines used for replanting the many vacancies in the vineyard, two years ago last spring, which were planted two feet deep and the holes gradually filled as they extended in growth, are now strong and vigorous, and gave far more fruit the past season than all the balance of the vineyard.

Of the new varieties recently planted the Lady, Moore's Early, Coe, and Worden, are the most promising. The Haskell Seedlings are too



fragile in leaf to maintain perfect health during our hot, dry summers.

The strawberry crop has been unusually good the past two seasons, and finer specimens are not often seen in any State than those which have graced the tables of the boarding hall.

Of the older varieties we can safely say that Downer's Prolific has given the best satisfaction as to bountiful yield, even size, and quality for table use. For a shipping variety it is probably too little colored, and when ripe lacking the requisite firmness. Green Prolific, when properly fertilized, has followed closely in yield, size, and quality. Next in order we place Wilson, the best market variety of them all. Charles Downing adds to its former record each year. It produces some less fruit than the preceding, but its extra large and even size, and its unsurpassed quality give it a prominent place in the list of most desirable sorts. In our climate it gives far better crops when adjoining such bountiful pollen producers as Downer or Wilson. Kentucky takes the lead among the latter varieties. It is perfect in flower, and bears fair crops of very large and very good fruit.

Of the thirty or more newer varieties we have in plantation, we can only say, as yet, that several of them are very promising. Further experience is needed to enable us to report any of them superior to the older sorts we have named. We can advise careful trial of Red Jacket, Captain Jack, Crescent Seedling, Pioneer, Duchess, Centennial, Triumph, and Forest Rose. Yet it is too early to name these in the order of their merit, and indeed we may with further experience reject some of those named for others in the collection. We have grown from seed about two hundred new varieties, from which we expect soon to select some valuable sorts for prairie planting. We have reason to be hopeful of desirable results, as the seedlings are the offspring of a systematic system of crossing.

The old raspberry plantation has been plowed under. It was planted on the same loose, porous soil as the vineyard. It has borne little fruit, but has proven a fine place for the students to get specimens of raspberry stem fungus. Beyond all reasonable doubt the condition of these canes as to fungoid development, was largely due to the lowered vitality induced by severe root-freezing on this porous soil. The new plantation, on firmer soil, exhibits as yet no traces of the disease, though most of the tips came from the old plat.

The Turner is the best red, and the Mammoth Cluster is the best black variety yet fruiting on the grounds. It is notorious that we have



no variety as yet perfectly hardy on our northern prairies. Even the Philadelphia last winter was killed to the snow line, and the Black Caps were so lowered in vitality as to produce little fruit that was worth picking.

We have, for trial, a raspberry from Manchuria, in leaf and cane looking like a cross of this fruit with the blackberry. Prof. Sargent reports its fruiting in Massachusetts, and its fruit to be "large, firm, clustered, of a brilliant scarlet color, and with flavor much like the Black Caps." If this proves perfectly hardy and its fruit is not what it should be in quality, we may expect its seedlings soon to give us the coming raspberry for the prairies. A variety of the raspberry we have from Russia seems to be trailing in its habit.

#### VEGETABLE GARDEN.

This is mainly managed with a view to supplying the College Boarding Department with fresh and seasonable vegetables. Something in the way of experimentation is done in noting the relative success of all the newer and best older varieties, under similar and varied treatment; yet we have no results to record worthy of the space they would occupy, with the exception, perhaps, of our trial of about two hundred of the newer or not widely known varieties of the potato. With two and three year's trial, we have rejected one hundred and thirty of the varieties as unworthy of dissemination for western culture.

Of the seventy varieties retained, and exhibited at the recent State Fair at Des Moines, perhaps not more than twenty will be found to rank with, or ahead of the Early Rose, Snow-Flake, and Peach-Blow.

In this list of twenty or more, we however expect to find varieties equal to the Peach-Blow in quality and market value, earlier in attaining growth in the fall, and less objectionable as to depth of eyes. We also expect to find an early potato equal in yield to the Early Rose, and better in quality for early summer use.

We cannot yet report decisively as to the value in all respects of any of the varieties retained in the list. Among the kinds worthy of trial for late use, we may safely name, of the deep-eyed varieties of the Peach-Blow class, the following: Young's Pink-Eye, Duke of Cumberland, Prairie-Flower, Indiana Russet, Bermuda, Faucett, Alaska Long Pond, Eureka, Fox-Eye and Strawberry Bloom. Of the promising varieties of the smoother eyed class for late use, we may safely name for trial: Bread (not Brownell's Bread,) Galva. Andes, Iowa

Beauty, Prince Regent, Massachusetts, Wilson, Victor and San Francisco.

For early use we may specially commend for trial Grinnell's Seedling, Snowball, Extra Early York and Extra Early Vermont. A number of the much lauded new varieties producing profitable crops, apparently only on very rich soils and with the best of culture, are not here named, but they are retained in the list for further trial.

It may be proper to remark that the varieties of late keeping potatoes giving the best yield, and most vigorous in habit of growth on common soils, are about all of the deep-eyed class like Bermuda and Strawberry Bloom. The *Victor* is perhaps well at the head of the smoother varieties in all the essentials of a perfect variety for winter use, but its color is objectionable for market.

We now have growing a great number of seedlings whose parentage is favorable for desirable additions to our list for western culture. We hope to report on some of these favorably in due time.

The vegetable garden has, previous to this year, shown a balance in its favor. The Treasurer's report this year shows it in arrears, mainly on account of expensive manuring, and too much unprofitable experimentation with potatoes and other garden crops.

#### PROPAGATING HOUSE.

This is only referred to as a model of cheap construction enforced by the refusal of the Legislature to make an appropriation for a plant house; and the equally cheap system of heating enforced by the limited appropriation to the department from the interest fund, which has to be apportioned among the several divisions of the work.

By a peculiar and somewhat original arrangement of the hot water pipes, the small conical boiler—no larger than a sitting-room stove—which heats the grafting room, is made to heat, perfectly and uniformly, two glass-covered pits 34 and 44 feet in length and respectively 12 and 14 feet in width, and the heating is done with less coal than suffices for most prairie sitting-rooms.

The pits are used for the propagation of plants for the vegetable and flower garden, and for the manifold methods of propagation in the experimental division. It answers our practical wants moderately well, but it is somewhat annoying to hear the remarks of our many visitors relative to the character and style of what they persist in calling the College "green-house."

## FORESTRY.

No additions are, for the present, being made to the forestry plats. In the class-room special attention is given to theoretical and practical forestry, and the work is encouraged in the State by an extended correspondence, the dissemination of forestry seedlings, and by the wide diffusion of copies of the Forestry Annual of the State Horticultural Society.

No attempt has been made to establish an arboretum creditable to the College and the State. A full collection of the trees and ligneous plants of the northern portions of the two continents would soon become an object of interest, and an enduring credit to the State. The utility of such a collection for experimental purposes, and for the use of students, is too evident for discussion. In other northern states liberal appropriations have been made by their legislatures for aiding work of this kind. So far in our State entomology and experimental horticulture and agriculture have struggled along without such aid.

## HORTICULTURAL CLASS.

A general idea of the work done in the class-room may be gathered from the course of study and practice outlined in appendix of this report. Class instruction in theoretical and practical horticulture now commences with the second term of the freshman year and closes with the first term of the junior year. Consecutive lessons, continued through three full terms, in combination with propagating house, and field practice and observation, and a full course in the closely related natural sciences, cannot fail in the near future to give to the State many intelligent young votaries of Pomona, who will make their mark in the development of systematic, methodic gardening.

## WANTS AND NEEDS.

I should not do justice to myself or the State if I failed to make a few remarks under this head. A feeling has grown up in the State that the Agricultural College is rich in lands and endowment fund, and that the Legislature should persistently refuse it all aid for experimental horticulture, agriculture, or buildings. It is true that the interest fund, so far, has supported the numerous academical and technical departments in a manner about meeting the requirements of the endowment act and State law. The annual appropriation of one

thousand dollars from the interest fund will quite respectably sustain horticulture and forestry in its legitimate work as a school department, but after paying the salary of foreman, for fuel for class-room and propagating house, for continually recurring wants in the way of fixtures, tools, etc., and fifteen cents per hour for team, and ten cents per hour for unskilled and detached student labor, but a trifle is left for the expenses of any of the non-paying lines of work most useful to the State at large.

If we had an appropriation from the State of about one thousand dollars annually for aiding this vitally important line of experimentation, in a very brief time a less number of visitors would express wonder at our want of an arboretum, of botanical gardens, of model experimental plats, etc.

Special aid of the Board of Trustees, with some aid from the State Horticultural Society, combined with pecuniary aid and double duty on the part of the writer, have permitted a fair showing in this report of experimental work that will be valuable to the State. But this showing in this special line has been at the expense of other divisions of our work which should not, and cannot, continually bear neglect. After careful consideration of the matter I can see no way open for the respectable maintainance of an experimental station that will annually grow in importance and usefulness to the State at large only by securing a small annual appropriation from the State Treasury.

**REPORT OF THE DEPARTMENT OF DOMESTIC ECONOMY.*****To The Honorable Board of Trustees:***

I BEG leave to make the following brief report of the present condition and future needs of the Department of Domestic Economy.

The course, both in the sophomore and junior years, was entered upon eagerly and pursued enthusiastically. Through the months of March and April the sophomore young ladies received careful instruction in washing and ironing. Each pupil did all her own laundry work and one shirt weekly in addition. Several had never done any work of the kind before and needed the closest supervision for the first two or three weeks. Unusual progress was made and most excellent work done, notwithstanding we were so cramped for room as to labor under serious difficulty all the time. The only way in which it was possible to manage the class was to divide it into two divisions, arranging for one-half to wash and the other to iron at the same time. It would have been quite impossible to have attended to these properly, since they must necessarily work in different rooms, had it not been for the very efficient help of Mrs. Thompson, and I wish to acknowledge here the obligations of the department to her. We were compelled to use hard water altogether, and though a useful lesson was learned as to its proper management, we should have had rain water also to have made the instruction complete. The narrowness of our quarters was, however, our most serious trouble. Six girls washing, five ironing, and two teachers in the small rooms assigned to us, left hardly space to turn. We could not find place for tables enough to give the ironers room to do their work easily and well, and for the five or six washers there was room for but four tubs. And when May had come, and it was time for the lessons in sewing and dress-making, we were obliged to abandon our own rooms altogether, since one of them is so poorly lighted it could not be used for sewing, and the other was so small that the class could not be seated in it by any arrangement whatever. After some difficulty and a good deal of anxiety on the part of the President and the teacher of Domestic Economy, we finally went into the room used by the Crescent Society, where we finished

the term's work. The teaching of washing, ironing and sewing was so entirely an experiment that many things were learned by the teacher as well as by the pupils, and she will enter upon the next year's work confident of her ability to improve and enlarge the instruction given. It is not too much to say that the class at least were satisfied that their time had been profitably employed.

The junior class commenced work in the kitchen about the first of August. They finished a course of twelve lessons, occupying their Saturday mornings through August, September and October. For the first time a text-book was used, the lessons being mainly taken from Miss Juliet Corson's "Cooking School Text-Book." There were seven in this class, and the same difficulty as to sufficient room hampered us still. I cannot contemplate the possibility of the department being so cramped in the future without serious foreboding. It is impossible it should be generously developed within its present narrow limits. The course even for the next year must be considerably abridged if given in the same rooms, and as the classes enlarge and the institution grows, year by year, less attention will necessarily be given to each pupil, since the classes must be more and more cut up into divisions and sub-divisions.

There are several problems for the Board to solve in connection with this Department. The expense of carrying it on will undoubtedly increase unless some wise expedient be decided upon to lessen it. I can not see why the experimenters in the kitchen and laundry should not pay a small fee as well as the experimenters in the chemical laboratory. The girls who do their own washing and ironing derive an actual pecuniary benefit from their lessons, since they are furnished soap, starch, etc., free of cost, and at the same time are not obliged to hire any washing done.

Upon consultation with Mrs. Thomson and with the approval of General Geddes and the President, I respectfully submit to the Board the following plan for lessening the expense and increasing the value of the work of the classes in Domestic Economy.

For practice in the laundry, each student shall do her own washing and ironing and in addition thereto shall do up one shirt and shirt-collar weekly. The expense of soap, starch, blueing, cleansing material and fuel, shall be accurately determined and divided equally among the class. This will relieve the College from all expense, except the cost of instruction, so far as the laundry work of the Sophomore Class is concerned.

The course for the class in sewing shall be as strictly progressive as possible. For the drill in hemming, over-and-over sewing, and back-stitching, the Boarding Department shall furnish the sheets and pillow-cases which have to be made every year, to such pupils as have not suitable work of their own. The darning, mending, and similar work, may be furnished either by the teacher or by each pupil for herself. Every young lady in the class shall be required to cut, fit and make at least one dress, under the careful instruction of a competent dress-maker. The material for this may be furnished by the student, or in case she does not wish to make herself a dress, can be furnished by the teacher. After sufficient progress in sewing by hand has been made, instruction on the sewing-machine shall be given.

The course in Cookery shall be so arranged that for the most part the products resulting from the work of the class can be consumed in the College dining-hall. The Steward agrees to furnish materials free of expense to the department, providing they can be cooked and returned to the dining-room in time for the regular meals. By a little forethought, and by means of systematic consultation with the house-keeper, it is believed that all such things as meats, vegetables, soups, pies, plain puddings, biscuits, bread, cake and like dishes, can be cooked by the class in sufficient quantity to be of service in the dining-room. This will of course involve such a fitting up of the new building as will give the proper facilities for cooking on so large a scale, but after the first expense is met, the cost of carrying on the class will be materially lessened and the benefit to the student as greatly increased. It will make the entire course strictly practical and admit of its development in such a way as to give the Freshman Class the benefit of its advantages, thus adding another year to the time allotted to the study of domestic economy. This plan cannot of course be carried into execution until enlarged quarters be assigned to the department, but even for the next year and in the old rooms some of its features can be adopted.

I have before me a circular of the Raleigh Cooking School in which two dollars an hour is charged for instruction beside the cost of material. Miss Corson gets one hundred dollars for six lessons, all her expenses, and all material furnished. I simply mention these facts to show the rank such instruction holds at present. Competent teachers are few in number and the demand is increasing rapidly. I have thought, if enlarged quarters and facilities be granted the department, its usefulness might be increased and a small sum accrue by opening a



Saturday afternoon class to all who desired to attend, and charging a small fee for tuition. I believe such a class might be made successful.

I am sure facts will bear out the assertion that no department of the College has for the last two years attracted more general attention, or added more to its popularity than the Department of Domestic Economy. I have had, within a few months, letters of inquiry from New York, North and South Carolina, Missouri, Indiana, Massachusetts and District of Columbia, each expressing great interest in my work, and asking numerous questions concerning it. Many papers, including the *New York Tribune and Independent*, the *Chicago Inter-Ocean and Journal*, the *Detroit Free Press*, the *Youths' Companion* and journals of like character, to say nothing of those of our own State, which have without exception approved the department, have spoken highly of the wise forethought of the Board of Trustees in establishing and fostering such an enterprise. The Bureau of Education at Washington has just published a pamphlet for general distribution on the subject of Domestic Economy in schools, which gives a full account of the department here. I call the attention of the Board to the fact that there are but five or six schools of cookery in the United States, and except our own not one school in which both laundry work and sewing are taught. All these flattering indications surely mean that usefulness to our commonwealth and credit to our College will certainly attend the full development of this department.

There are many things to be seriously studied into if a new building and better appliances are indeed secured. We ought to make sure that no mistakes shall occur either in the arrangement or fitting up of such a building. The newest and best methods of laundry work, the most advanced processes in cooking, the cheapest, most durable and best utensils, the wisest methods of instruction—all these should be clearly understood. And they can be studied nowhere except in some large city where each has been brought to its utmost perfection. We must remember that though we have done a great deal, we have worked without precedent, and if now we can add to the knowledge gained by actual experiment that which greater years of similar work has garnered, we shall be able to stand comparison with any such school, no matter where situated. The New York Cooking School was the first opened, and has been the most successful and best known of any such school in America. To visit this and similar schools, to spend a little time in some of the best laundries, to look up the question of cheap



**and good** utensils, to study the most extensive markets, to become **familiar** with the most economical and skillful processes of cutting up **and preparing** meats, is my extreme desire. I believe it will be **re-**  
**turned** many-fold to the department, even in the course of the next **few years**, and I am confident that the Board can in no way further **its interests** better than by making an appropriation sufficiently large **to justify** the expense.

## EXPERIMENTAL WORK IN THE CHEMICAL LABORATORY FOR 1878 AND 1879.

DURING the last two years careful analyses have been made of the most common wild and tame grasses, in order to determine their relative values for hay. In this work I have been obliged to rely mainly on Mr. W. K. Robbins, a graduate of 1878. The grasses were collected by him, and the determinations of proteine and moisture are his work; the other determinations were made by myself. These analyses are, I believe, the only ones that have been made, and are a sample of what our students can do. The following, with a few additions to the tables, are taken from Mr. Robbins' articles in the *College Quarterly* for July and September, 1879:

TABLE OF GRASSES CUT IN 1878.

	Fats.	CARBO-HYDRATES.		Ash.	Proteine.	Moisture.
		Cellulose.	Starch, etc.			
Andropogon.....	6.39	25.29	42.85	7.27	8.03	10.17
Sporobolus .....	5.17	28.30	42.68	6.60	7.82	9.43
Timothy .....	2.95	34.55	49.80	5.04	7.86	9.80
Spartina .....	7.14	31.75	37.58	3.67	7.80	12.06
Sedge.....	5.27	24.09	44.79	7.87	7.99	9.99
Red Top.....	4.54	30.34	43.55	7.83	5.78	9.04
Blue Grass .....	3.35	28.84	46.61	7.24	5.14	8.83
Muhlenbergia .....	5.19	27.93	41.87	8.50	6.53	9.98

The tame grasses, timothy, red top, and blue grass, were cut just after the period of blooming, the wild grasses the last of July, the sedge the last of August.

TABLE OF GRASSES CUT IN 1879.

	Collected.		Fats.	Proteine.	CARBO-HYDRATES.		Ash.	Moisture.
					Cellulose.	Starch, etc.		
Timothy.....	May	12	6.37	17.95	17.76	43.94	10.65	9.33
Timothy.....	June	16	6.32	11.26	24.75	41.32	5.65	10.70
Timothy.....	July	22	4.53	7.21	29.92	43.54	4.49	10.31
Red Top.....	May	12	8.05	15.25	19.48	35.45	11.09	10.18
Red Top.....	June	16	4.66	7.63	26.01	42.27	8.98	10.45
Red Top.....	July	22	4.35	7.25	29.68	37.52	10.65	10.55
Blue Grass.....	May	12	9.22	15.88	22.90	34.04	8.52	9.44
Blue Grass.....	June	16	3.35	5.14	28.84	46.60	7.24	8.83
Andropogon.....	May	12	8.61	14.67	22.16	37.53	8.04	8.99
Andropogon.....	June	30	6.09	9.44	25.32	43.14	6.06	9.95
Andropogon.....	July	22	6.44	7.64	26.04	42.53	7.09	10.26
Andropogon.....	Aug.	16	7.39	6.61	32.08	40.64	4.44	8.84
Andropogon.....	Sept.	9	6.03	7.24	34.25	38.36	6.00	8.12
Spartina.....	May	12	6.27	17.19	28.02	35.47	6.96	6.09
Spartina.....	June	16	5.94	10.48	29.80	40.06	4.53	9.19
Spartina.....	July	22	5.41	9.43	30.28	40.17	4.96	9.75
Spartina.....	Aug.	16	5.25	6.97	29.92	44.56	4.27	9.03
Spartina.....	Sept.	9	5.00	7.12	29.83	45.33	5.53	7.19
Muhlenbergia.....	May	12	6.48	17.84	25.74	31.21	8.59	10.14
Muhlenbergia.....	June	16	6.14	11.33	29.74	35.66	6.84	10.29
Muhlenbergia.....	July	22	5.33	7.69	28.58	35.66	13.15	9.59
Muhlenbergia.....	Aug.	16	4.95	7.69	31.85	38.08	8.56	8.87
Sherobolus.....	Sept.	9	4.70	7.73	32.38	38.52	8.65	8.02

The *Andropogon*, of various species, is known to most farmers by the name of "blue stem," or "blue joint," and grows on low ground, which, however, is generally rich and tillable. The genus *Spartina* furnishes most of the species which make what is known by the common name of large, coarse, "slough grass," which grows on quite low, moist ground. The grass that grows around ponds and in quite wet places, with a round, hard stem and a bushy top, sometimes called "small willow-top," of the genus *Muhlenbergia*, is placed last, but is about equal to blue grass in value.

The compound of most value in the table is the *proteine*, as it contains nitrogen in combination, and is the source of flesh and power. The fat and carbo-hydrates are of the next importance, as they furnish respiration material. The *cellulose*, or woody fibre, is, part of it, converted into sugar in the process of digestion, but this part decreases as the percentage which the plant contains increases. Hence, a small

per cent of it is desirable. The moisture and ash are little to be taken into account only as they influence the percentage of other compounds.

The table shows in a strong light the fact that as a grass grows older it becomes lessened in value as food for sustaining the body; thus the nitrogenous substances to which we have given the general name of *Proteine* decrease very rapidly, there being only one (*Spartina*) which has not decreased over one-half in the amount of this compound from May 12 to July 22, and several have lost almost two-thirds in the same time: now, this, as before stated, is the most important compound in the composition of a food, and when this falls off at the rate of three per cent per day (as in the case of timothy) it amounts to something worthy of serious consideration. But this is not the only way in which grass suffers a loss of value by age.

As the plant grows older the cell walls become thickened by a deposition of cellulose, which makes the food less palatable, and besides it exerts an unfavorable influence upon digestion. In the first place, the greater the amount of it contained in a food the less of it will be digested; and in the second, it decreases the digestibility of fats, soluble carbo-hydrates (starch, etc.), and proteine, often causing the latter to vary in digestibility from seventy to as low as thirty-nine per cent of the amount which the plant contains: hence, a food containing half as much proteine as another, would not be worth half as much, supposing the other to have exactly the same amount of cellulose, which, however, is not the case, for as the percentage of proteine decreases that of cellulose increases, as will be noticed by referring to the above table. The starch, etc., is seen to increase with age, but as this is accompanied with an increase of cellulose which decreases its digestibility the amount of it available to the animal will not be as great.

The fats also are shown by the table to decrease; and as the percentage of them digested is lowered by the increase in cellulose, they show still another decrease in the value of hay.

We can thus see that as the period of growth advances, all those compounds which are of value to the animal rapidly decrease, while the one which we should seek most to avoid increases in a like manner, and hence the proper time to cut hay becomes a question of no small importance to the farmer who wishes to receive the highest reward for his labor; the relative values of different hays varies at different times, and the one that is superior at one season of the year is inferior at another. Thus placing the richest first, the order for May 12

would be Timothy, *Mulenbergia*, Red Top, *Andropogon*, *Spartina*; and for June 16 it would be Timothy, *Muhlenbergia*, *Andropogon*, *Spartina*, Red Top; and for July 22, *Andropogon*, *Spartina*, *Muhlenbergia*, Red Top, Timothy.

It will be observed that the tame grasses lose in value more rapidly than the wild—for the reason perhaps that they attain their full growth much sooner, so the matter of delay in cutting tame hay is attended with greater loss than with the wild. Next year I hope to determine the relative value of the wild and tame grasses for grazing. The tables above show their comparative value for hay, only one cutting being made from the same spot during the year.

## POPULAR CONTRIBUTIONS FROM THE BOTANICAL LABORATORY.

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BY C. E. BESSEY, PROFESSOR OF BOTANY.

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### THE LIVING PARTS OF A PLANT.

AN examination of the living tissues of a plant by means of a high power of the microscope, shows that they contain a considerable quantity of a substance which is identical with that found in living animals. Comparing a piece of a dead plant with a living one, this substance just referred to is found wanting, or if present, it is shriveled up or disorganized. This substance is the *Protoplasm* of the scientific world; it might have been called with equal propriety and greater plainness "life substance," for it is capable of demonstration that it is always present in living parts, and always absent from or partially destroyed in dead parts. Furthermore, if we place under the microscope a small living plant (and it is most convenient to take one of the simpler microscopic ones) it can easily be seen that anything which seriously injures the *protoplasm* destroys the life of the plant; thus if a drop of iodine be applied, the *protoplasm* shrivels up, and from that instant life ceases.

Every part of all annual plants commonly grown by the farmer contains this life substance, and is consequently alive: but the case is different with the trees and shrubs which come so largely under the care of the horticulturist. In an apple tree, for example, the microscope shows that there is no *protoplasm* in the heart-wood of the trunk and branches, and that even in the sap-wood none can be found except near to the bark. Examining the bark no *protoplasm* is found except in the inner layers. If now the thin layer between bark and sap-wood be examined at any time of the year an abundance of *protoplasm* is found. This intermediate layer (the Cambium layer of the

botanists) shades off on either hand into layers which have less and less—and finally no *protoplasm*. We may express it another way, and say that the layer of life shades off on either hand into death. In the summer the Cambium layer is in direct communication with every leaf, and it is prolonged downward through all the living roots to their young and active tips. Thus there is a continuous living tissue from one extremity of the tree to the other, from the absorbing organ, the root—deep in the ground—to the assimilating organ, the leaf—high in the air.

If by any means the continuity of the living tissues of a plant is broken, as a rule, the separated part must die. This is the reason why branches and twigs die if girdled by a knife or insect, or by any other means, and the only apparent exception to this rule is when a girdled branch by growth renews the communication; this, however, rightly considered is in reality no exception to the rule given. So too in the operations of grafting and budding the continuity of the living tissue is broken for a time, but by the growth of scion and stock the continuity is again made perfect. It scarcely need be said that upon the speedy closure of the break in the continuity of the living layer depends the life of the scion.

Trees girdled by mice sometimes live for some time, and in some cases recover: in the latter case it is invariably due to the fact that the living tissues above and below the injury have joined again into a continuous whole: in every other case the separated part *must die*, sooner or later, and the catastrophe is only deferred by the amount of available plant-food it contains, and its ability to make use of it. It is said that away at the summit of a girdled giant red-wood, in California, the branches continued growing, and the leaves remained green for many years after the lower part of the trunk was dead and dry.

#### COMPARATIVE HISTOLOGY OF LEAVES.

The introduction of the great number of varieties of apples and pears from Russia and Eastern Asia, made by Professor Budd, have made it possible to make microscopical examinations of the leaves. These have not as yet been sufficiently numerous to permit of a full report being made, but this much can already be said, that there appear to be marked differences in the details of microscopical structure between the leaves of the hardier and those of the tenderer varieties. The epidermis of the hardy varieties appears to be thicker,

and in a cross section of the leaf the "palisade cells" are more numerous. The subject is a most interesting one, and it is hoped that, as the opportunity for making an extended series of systematic examinations is now a most favorable one, sufficient time for the purpose may be found during the next few years.

#### WHITE, OR ALBINO LEAVES.

Every one, perhaps, has noticed here and there in a field of Indian corn, a stalk whose stem and leaves were perfectly white, and doubtless many guesses have been made as to the curious cause of the phenomenon. Under the microscope such white plants are found not to be structurally different from normal plants, with but one exception. The protoplasm is disposed in the usual way, and the cells themselves have about the same size and shape. There is this difference, however: the little masses of protoplasm which in normal plants are saturated with the green pigment, Chlorophyll, are in the albinos, entirely destitute of this substance. Now, it has been shown by carefully conducted experiments made by Sachs (*Experimental Physiologie*) that in the absence of iron from the food of plants, their leaves and all other organs are white. It is, therefore, likely that albinism is in some way due to a deficiency in the supply of iron to the young plant. The most probable solution of the question is that those grains of corn which produce albinos are themselves wanting in a sufficient quantity of iron to enable the young plant to manufacture chlorophyll.

A pure white plant is necessarily short-lived, for the green matter (chlorophyll) is a kind of digestive substance, in a rough way comparable to the digestive fluids of animals, and in its absence, the plant being unable to digest, soon perishes from starvation. During all the time that a *perfectly white* plant is growing, it receives its nourishment from the seed, and when that store is exhausted, it must die. True the roots may get water; in that water there will be potash, lime, phosphorus, and other substances, and these may be added to the plant in small quantities, but of the substances which enter into the composition of the plant, nothing can be added more than is found in the seed. In some respects these white plants remind us of many parasites and saprophytes (*i. e.*, plants which live on dead organic matter); the Indian-Pipe and Beech-Drops and all the fungi are wanting in this coloring matter, and like the albinos, they are incapable of using carbon dioxide (carbonic acid) as food.



THE DIAMETER OF WOOD-CELLS OF PLANTS.

Much has been said about the hardiness of a plant depending upon the size of its cells, it being supposed by some that the cells of hardy plants are considerably smaller than those of tender ones. Without entering upon a discussion of this subject at this time, it may be well to give the results of some careful microscopical measurement made in the Laboratory. The measurements were confined to the mature wood-cells, and will serve only to give a general notion of the relative size of the cells of the living parts (Cambium). Wood-cells develop from Cambium-cells, and the change in the diameter in the process is very little in the tangential direction, so that the measurements given will apply with an exceedingly small error to this dimension of the Cambium cells. The measurements are given in decimals of a millimeter:

	TANGENTIAL DIAMETER.	RADIAL DIAMETER.
Silver Maple.....	.0125	.0125
Iron-wood.....	.0160	.0160
Hackberry.....	.0100	.0100
White Willow.....	.0114	.0114
Basswood.....	.0150	.0150
Virginia Creeper.....	.0200	.0100
Wild Grape.....	.0118	.0118
Apple (European specimen).....	.0125	.0125
Pear (European specimen).....	.0125	.0125
Tulip tree, or Yellow Poplar, of Ohio.....	.0250	.0250
Chrysanthemum (old woody stem).....	.0125	.0200
White Pine (cells formed early in the season)....	.0500	.0275
White Pine (cells formed late in the season).....	.0200	.0125
Arbor Vitæ (cells formed early in the season)....	.0200	.0225
Arbor Vitæ (cells formed late in the season).....	.0200	.0125

THE SUPPOSED CIRCULATION OF SAP.

Vegetable physiologists are now pretty generally agreed that there is, properly speaking, no such thing as a circulation of the sap in a plant. The facts as to this question appear to be as follows, for ordinary plants, such as the common herbs, shrubs and trees:

1. Water enters the plant through the roots and escapes from it through the leaves. Its entrance is due to the power of imbibition possessed by the life substance (protoplasm) in the roots. Its escape is due *solely* to evaporation. Now, when evaporation takes place, there must be an upward movement of the water, but this movement is like the upward movement of the water in a suspended towel, one end of which is in a basin of water, and in either case the more rapid the

evaporation is, the more rapid the upward movement. Furthermore, when evaporation ceases, as in a damp atmosphere, then in either case, again, the upward movement of water ceases.

2. This water, while in the plant, is continuous from side to side, and extremity to extremity. One of the most common errors is the opinion that in some way the water in the plant is partitioned off into small tracts and spaces. The fact is that every living part of a plant is freely permeable to water, and it can pass from cell to cell, and tissue to tissue, as easily as the water in a fish-pond passes through the coarse meshes of the nets suspended in it. Even in the apparently solid parts of plants, as the new wood of the stems, the water passes freely through the walls, and it is only in the old, dead, and lignified parts where any considerable resistance is offered to its passage.

3. There are many soluble substances in the cells of different parts of plants, consequently as the water passes through one cell it holds in solution for the time being, its soluble matters, but as it passes out it may, or it may not carry along these substances. To return to the fish-pond comparison again, while the water may pass freely through the nets, not all of the fishes can do so, or, in other words, that which offers no obstruction to the water prevents the passage of certain of the fishes (the larger ones). So it is with the cell-walls, while the water may pass freely some of the substances are prevented from passing through. Thus in the petals of many flowers contiguous cells may have on the one hand a red, and on the other a yellow coloring matter, both soluble, but both incapable of passing through the single cell-wall which separates them, while the water in which they are dissolved passes freely. On the other hand, some substances appear to pass through cell-walls as easily as the minnows pass through the nets in the fish-pond.

4. The soluble substances of the second class (*i. e.* those which pass freely through the cell-walls) are lime, potash, and other minerals, together with such organic compounds as sugar, inuline, etc., the latter made from carbon dioxide and water in the leaves. Now if we inquire attentively as to the movements of these substances we find that not only do they move freely through living cell-walls, but that they move always towards the place or places where they are being used in the growth of tissues. Thus in the formation of the cell-walls (pure wood) sugar is used up, consequently there will be a movement of the sugar in surrounding tissues towards the place where the sugar is used. But there will be but a very little movement of the water

toward this point, for in this stage water is not and cannot be transformed into cell-wall material.

5. The movement of sugar, inuline, lime, etc., is due to the force of diffusion, these substances diffusing themselves through the water without any necessary movement on its part. In point of fact sugar diffuses mostly downwards (because it is made in the leaves), and lime, potash, etc., upwards (because obtained by the roots), in the same water.

6. There is no mechanism for a downward flow of the water in the plant. The only arrangement for any movement of the water is that already described, in which the movement is entirely upward because of evaporation from the leaves.

7. The common saying that the sap goes down into the roots in the fall is entirely erroneous. On the contrary there is rather more water in tissues of the stem and branches in the winter than in the corresponding ones in the spring and summer.

#### THE SUPPOSED ELONGATION OF THE TRUNKS OF TREES.

It is a well known fact that the joints (internodes) of very young stems and twigs elongate for a few days (or perhaps for a few weeks in extreme cases), after growing from the bud. This seems to have given rise to the opinion that stems always elongate, and probably this was strengthened by some hastily made observations. While vegetable physiologists have long known such supposed after elongation to be impossible, it was deemed best to settle the matter in a manner which could be understood by all.

On May 3, 1875, six trees were selected and treated as follows:

1. A young Silver Maple, whose trunk had a diameter of three inches. Three tacks were driven into its trunk a foot apart; then after applying an accurate twelve inch boxwood rule, a knife was drawn across the head of each tack making fine marks which were thus exactly one foot apart.

2. A young Silver Maple, whose trunk had a diameter of two inches. Into this two tacks were driven, and the fine marks were made as in the previous case.

3. A Norway Spruce, about six feet high. Into the terminal shoot two tacks were driven so that the twelve inch rule could just be slipped between them, the uppermost tack being about two inches from the end of the shoot.

4. A Siberian Crab tree, whose trunk had a diameter of about one and three-fourths inches. Two tacks were driven into the trunk and fine marks were made upon them as in Number One.

5. A young Norway Spruce. Into the part of the stem which grew as the terminal shoot in 1873 (consequently at the time of the experiment two years old) two tacks were driven, and the ruler placed upon the lower one, and a fine mark made upon the upper one.

6. A Siberian Crab tree with a diameter of trunk of about one and one-half inches. Two tacks were driven into the trunk and fine marks were made as in Number One.

At the close of the growing season (October 1, 1875), all the trees were carefully examined, with the exception of Number 2, which had been destroyed in a gale. The utmost care was taken in comparing the measurements of the spring with those of the fall, and in no case was there any difference whatever. Even in Number 3, where, if anywhere, an elongation might have been expected, there was not any difference between the two measurements.

#### BOTANICAL ASPECT OF APPLE BLIGHT.

Microscopical examination of blighted twigs give the following results:

1. On the dead and dry leaves a fungus of the genus *Macrosporium* is found. This, however, is a common attendant upon decaying parts of plants, and is not a parasite, hence it is to be regarded as an accompaniment and not a cause of the blight.

2. The brown discoloration appears to travel up the petiole into the leaf. The blade of the leaf is apparently not the seat of the disorder.

3. In a cross-section of the green portion of a partially browned leaf nothing peculiar or abnormal can be detected.

4. In a similar section of the brown portion of a partially brown leaf the protoplasm is brown and contracted, but in this there is nothing peculiar; in the ordinary death of a leaf (before the time for its fall in autumn) the protoplasm has the same appearance.

5. Fungus threads (hyphæ or mycelium) are not found in the leaf tissues of either the green (living) or the brown (dead) portions.

6. At the base of the current season's growth at the point where the new growth joins the growth of the previous year the pith is (in many instances at least) found to be dead, brown and dried up.

Now it is easily shown that many twigs are injured just enough during the winter to kill the pith for from a quarter to half an inch below the terminal bud, while the bud itself is not killed. This took place in the winter of 1878-9 very abundantly, and many such injured twigs grew without blighting during the season of 1879, while many others blighted badly.

These facts point to this explanation: Injured twigs may shoot up and grow, even though the pith is killed, provided that the season is a favorable one, or that in some way the tree is favorably situated, so that the new twigs receive water enough to make good the loss by evaporation. If, on the other hand, the season is a dry one, or if dry, hot days alternate with damp ones, not enough water can reach the twigs to supply the great loss by evaporation; the interval of dead pith very greatly narrows the channel for the supply of water, and when the evaporation is excessive, the death of the twig must ensue.

#### THE RATIO OF POLLEN-GRAINS TO PISTILS IN INDIAN CORN.

A pollen-grain of the Indian corn is about .004 inch in diameter, which would allow 14,000,000 to be packed without crushing in a cubic inch. An anther of Indian corn has, as determined by approximate measurements a capacity of about .00025 cubic inch, therefore if packed full (which it never is), it might contain 3,500 pollen grains.

Two fresh anthers were emptied out upon separate slides and spread out as evenly as possible, and then by counting the number of pollen-grains upon several areas under the microscope and then making the proper calculation, the number for one anther was estimated at 1,500 and for the other, 3,000. Allowing for errors in calculation the average number of pollen-grains was assumed to be for each anther about 2,500. By careful counting, the number of stamens in an average sized tassel was found to be 7,200. This multiplied by 2,500, the number of pollen-grains in each anther gives the whole number of pollen-grains in a tassel as 18,000,000.

In a medium sized ear of corn there are seven hundred and twenty grains, or in other words there were so many pistils in the young ear. Allowing, however, 1,000 pistils to each young ear and two ears to each stalk, the pollen-grains are to the pistils as 9,000 to 1; in other words, for every pistil of Indian corn to be fertilized, there are provided 9,000 pollen-grains.

OBSERVATIONS ON THE GROWTH OF TREES.

On the fourteenth of May, 1875, two Silver Maples, which were just beginning their season's growth, were selected.

No. 1 was about twenty feet high and its trunk had a diameter of about five inches.

No. 2 was about seventeen feet high, and the diameter of its trunk was between three and four inches.

On the first day of October, my assistant, Mr. Snell, made, under my direction, a series of careful measurements of the twigs which had grown the current year. It was found from those that upon tree No. 1, two hundred and eleven new shoots, averaging 16.79 inches in length were formed, making a total length of twig extension of 295.22 feet.

In tree No. 2, one hundred and forty-five new shoots, averaging 17.77 inches in length were formed, making a total length of twig extension, in this case, of 214.72 feet.

Supposing the growth to have been uniform throughout the season of one hundred and forty days, this would be at the rate of a little more than twenty-five inches a day in tree No. 1, and a little more than eighteen inches a day in tree No. 2. As, however, the growth in length takes place in from one-half to three-fifths of the season, the actual daily growth of twigs must have aggregated from forty-two to fifty inches in No. 1, and from thirty to thirty-six inches in No. 2.

Measurements were made the same year, of four spruces, and in these the aggregate twig growth of the two preceding years was also carefully estimated. The results are given in the appended table.

	Twig growth of the years.	Number of twigs.	Average length of twigs, inches.	Total growth, feet.	Length of terminal shoot, inch's.
No. 1. Norway Spruce, eight feet high .....	1875	645	4.9	263.0	14
	1874	450	5.1	191.0	20
	1873	315	3.1	81.7	13
No. 2. Norway Spruce, ten feet high.....	1875	1,065	4.2	372.6	18
	1874	625	3.4	176.8	10
	1873	450	4.4	165.0	18
No. 3. Black Spruce, seven feet high.....	1875	902	3.5	263.0	11
	1874	656	3.4	185.8	6
	1873	450	4.1	153.7	10
No. 4. Black Spruce, six feet high .....	1875	875	3.1	226.0	6
	1874	635	3.4	180.0	8
	1873	480	4.3	172.0	11

THE COLORS OF THE WILD FLOWERS OF IOWA.

If we exclude from consideration the grasses, sedges and other plants whose flowers are devoid of decided coloration, and also make no account of the rare plants, the colors of the remaining ones present the following interesting relations:

TABLE I.

*Number and per cent of flowers of different colors.*

COLOR.	NO. OF SPECIES.	PER CENT.
White .....	143	Equal to 37¼ per cent
Yellow .....	102	Equal to 26½ per cent
Red .....	27	Equal to 7 per cent
Purple .....	73	Equal to 19 per cent
Blue ....	39	Equal to 10¼ per cent

TABLE II.

*Showing the colors of the above flowers by species, during the different months of the blooming season.*

	WHITE.	YELLOW.	RED.	PURPLE.	BLUE.	TOTAL.
April .....	3	.....	.....	2	1	6
May .....	29	8	2	10	4	53
June.....	38	23	9	14	9	93
July .....	50	32	6	24	11	123
August.....	21	32	10	23	10	96
September ..	2	7	.....	.....	6	15

If the facts in the last table are presented in percentages the proportions of flowers of different colors will be more clearly brought out.

TABLE III.

*Percentages of species of different colors, for the months of the blooming season.*

	WHITE.	YELLOW	RED.	PURPLE.	BLUE.
April.....	50	.....	.....	38⅓	16⅔
May.....	54½	15	3⅓	19	7½
June.....	40¾	24¼	9¼	15	9¾
July .....	40½	26	4¾	19½	9
August .....	22	33⅓	10⅓	24	10⅓
September .....	13⅓	46⅔	.....	.....	40



It is thus seen that the per cent of white species decreases from spring to fall, whereas the per cent of yellow flowers regularly increases. With the purple and blue species the percentages are highest in the spring and fall. In the preceding table (Table II) the actual number of species, in nearly every case, shows an increase to the middle of the season, and from thence a decrease; the greatest number of species of every color but red being in bloom in July.

If we add the white and yellow-colored species together on the one hand, and the red, purple and blue ones on the other, the first comprising the light colors and the second the dark ones, we have the following:

TABLE IV.

COLOR.	PER CENT.
Light colored species during the year.....	63¾ per cent
Dark colored species during the year.....	36¼ per cent

If we compare this with the results obtained by Buchan in the Flora of Great Britain, we find that the percentage of white species is greater in Iowa, while for the dark colored ones it is less.

COLOR.	PER CENT.
Light colored species in Great Britain .....	60 per cent
Dark colored species in Great Britain .....	40 per cent

THE CANADA THISTLE.

As this slander upon our good Canadian neighbors (for it is a native of Europe and *not* of Canada at all) is now an outlawed plant, every one should be able to recognize it, and distinguish it from the other thistles. The following description, in popular language, will enable any one to distinguish this troublesome weed without difficulty:

*Plant* usually low, generally about 20 inches in height, rarely 2½ or 3 feet; very much branched, and spreading. *Leaves* many, rather narrow, and very prickly; green on the upper side, but generally downy on the under side. *Flower-heads* smaller than in any other one of our thistles, usually not more than a half-inch in diameter. *Roots* and *underground stems* numerous, the latter white and scaly, and creeping horizontally about 6 or 8 inches below the surface of the ground.



The two characters to be most taken into account are the *small size of the heads*, and the *creeping underground stems*.

If it be borne in mind that the plant spreads by the underground stems, and not the true roots, and that unlike ordinary thistles, this one is not a biennial but a perennial, those who have to deal with it will be able to do so more intelligently and successfully.

#### SOME VALUABLE WILD GRASSES.

It has doubtless often occurred to the observing man that some of our native grasses might be introduced into our meadows as forage plants. Our prairie soils and climate are so different from those of the Eastern States and Europe, from which all of our cultivated grasses have been derived, that it is no wonder our meadows are often not as good as they used to be in the East. There can be no doubt that the same principles as to soil, climate and other surroundings which hold among fruit trees, also hold among grasses. We no longer expect the best results from the growth of fruit trees which come to us from regions which differ greatly from the prairies in the surroundings indicated above.

Thus far we have in the prairies made use almost entirely of the introduced grasses from the Eastern States or Europe in laying down our meadow or grass lands. And it must be admitted that we have in many cases met with more of success than could have been anticipated under the circumstances. The success has, however, been by no means satisfactory, and there need be no excuse offered here for calling the attention of our prairie farmers to several wild grasses which are very promising.

*The Drop-Seed Grasses.* (*Muhlenbergia*, *sp.*) There are several kinds of wild grasses which are variously known as Small Willow Top, Limber Bill, Fine Slough Grass, etc., growing in moist places, and which appear to possess many, if not all, of the characteristics which a good hay grass should possess. These grasses are found on our prairies, growing around the edges of the sloughs. They do not grow *in* the sloughs, but always form a belt varying from a few feet to many rods in width, surrounding the wetter part of the slough. They do not naturally extend upon the highland.

There are several species of these grasses, but the one which appears to be the most important and perhaps valuable, is known to botanists

as *Muhlenbergia glomerata*. It has a fine stem which branches several times, and has a great number of leaves of moderate length. It blooms late, so that the "heads" are seldom seen; in fact it appears to be the general impression that it never produces flowers or seed. Late in the season, however, it produces a "head" somewhat like that of Timothy, but not so compact.

This is the chief grass in the best prairie hay, and those parts of the prairie which are known by our best hay-makers to produce the most valuable hay always have a very large percentage of this grass. Hence it may be concluded that there is some real foundation for the general opinion of its value, and that it would prove a valuable addition to the grasses of the farm.

Turning now to the grass itself it is seen to possess to a considerable extent the qualities which are desirable in a hay grass, viz—(1) its stem is not too large, (2) its leaves are abundant, (3) it forms a good sod, and so holds possession of the ground. Quite similar to the species described, is another also quite common in the same locality; this one is known as the *Muhlenbergia Mexicana*, and appears to be little if at all inferior to the preceding.

Examining the analyses of grasses made by W. K. Robbins (published in *The College Quarterly*, Vol. 2, No. 2,) it will be seen that the grasses under consideration rank very fairly from the chemical standpoint. The amount of *Proteine* (*i. e.* flesh-forming material) present was shown to be greater than in Red Top or Blue Grass, both of which are grasses of acknowledged value. The amount of starch was determined to be less in these wild grasses than that in our common cultivated species, but this is compensated by a considerably greater amount of fatty matter present in the former than in the latter. The results of the analyses are, on the whole, favorable to the wild grasses, for we find that when compared with the *best* of the cultivated ones they make a very good showing.

Another point: can these wild grasses be grown elsewhere than upon the low moist land bordering the sloughs? An affirmative answer cannot be given with certainty to this question, but many individual plants have been observed which have strayed upon the high land, and these were in all cases doing well. Doubtless under proper management they might be made to succeed upon ordinary high prairie, excepting of course the leachy hills which are lacking the necessary moisture.

The only objection yet suggested to these grasses is that it is not certain that they will endure pasturing, and the disappearance of prairie grasses when closely pastured is cited in evidence. If they have this fault it is a serious one, but it must be said that thus far the evidence is not conclusive.

A serious obstacle to bringing these grasses into cultivation will be the difficulty of getting the seed. At first it must be gathered by hand from the places where they grow wild, as no seed dealers in the world keep it. Necessarily the price will be high at first, and probably will always be so. This last will, however, not be an undesirable thing, as it will add one more to the profitable seeds for the farmer to grow for sale.

*Blue Joint* or *Blue Stem* (*Andropogon, sp.*). This large coarse grass appears at first sight to be of no value for feeding, and to the farmer who has but recently come to the prairie States it has naturally an unpromising look. The stems are coarse and reed-like, and the leaves are not very numerous, and a New England farmer would doubtless prefer to feed old straw to his cattle rather than this Blue Joint. And yet when he enjoys a closer acquaintance with this rank-growing grass he will respect it, and finally come to regard it as one of the valuable forage plants.

Botanically, Blue Joint is a near relative of Indian corn, Sugar cane and Broom corn, and it partakes much of their nature. In fact it may be compared to these, and in the comparison it does not suffer at all. Every one knows how valuable cornstalks are for feeding, and we know that, although the stems are thick and heavy, cattle manage to eat most of them if they were cut early enough to retain their nutritious qualities. Now then, Blue Joint possesses to a great extent the nutritive qualities of Indian corn, but has the additional advantage of having its stems much more slender, so that they can readily be eaten by cattle. The chemical analyses made in the Laboratory of the Agricultural College by Mr. W. K. Robbins bear out the assertion that Blue Joint is one of our most nutritious grasses, and the practice of some of our most observant and provident farmers fully confirms the results obtained by the chemist. There need be no hesitation in saying that we have here a wild grass which it would pay most excellently for our stock-growers to cultivate—not to the exclusion of Indian corn as a fodder, but in addition to, and as a partial substitute for it.

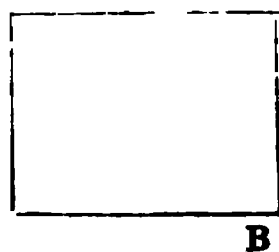
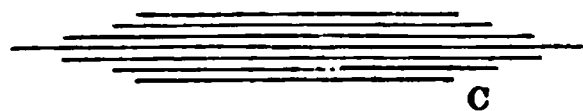
When it is remembered that it is a perennial, and that a field once seeded with it will last for many years, it at once becomes evident that to the stock-grower the escape from the necessity of annual planting and cultivating will prove a great saving of expense. It is hardly necessary to say that in order to make the best fodder from Blue Joint it must be cut before it goes to seed, otherwise the stems become hard and dry, and the leaves lose much of their juiciness.

## CONTRIBUTION FROM PHYSICAL LABORATORY.

BY J. K. MACOMBER.

## LIGHTNING RODS.

THERE are few topics on which the general public are less informed than that of lightning, and the best methods of protecting buildings from its effects. In its manifestations it is often terrific in character, so that the fears as well as the ignorance of the people are made use of by unscrupulous men for the purpose of swindling them. A brief note on the theory of electricity as applied to lightning will be given here, and then some of the erroneous methods of putting up lightning-conductors will be noticed. In all its manifestations electricity appears to have a double character. This fact is recognized by saying that there are two kinds of electricity. One is called positive and the other negative. Electricities of the same name repel; those of the opposite name attract. Under ordinary circumstances all bodies contain both of these electricities in the neutral or combined state. By certain mechanical and chemical means these electricities can be separated, and then they are said to be "free." For example, dry a piece of glass on a cold winter's day, and rub it with a silk or woolen cloth. It will then attract dry pieces of paper or sawdust. Sealing-wax is better than glass, and unless the air is very dry the experiment will not succeed. The glass takes one electricity and the cloth the other. During a thunder storm great quantities of free electricity accumulate in the



clouds. This electricity is generally positive. Let C in the figure represent a cloud charged with positive electricity. Let B represent a building on the earth beneath. The positive electricity of the cloud will attract the negative of the building and earth to the upper part of the building and will repel the positive away into the earth beneath.

Now, if the charge of the cloud becomes very great it will dart across the intervening air and meet the opposite electricity on top of the house. This is expressed by saying that the lightning "strikes." Physicists recognize two kinds of bodies, called good conductors and bad conductors. The last are also called insulators. It is a well known fact that a charge of electricity passes harmlessly over a good conductor, such as a metal; while it is likely to seriously injure an insulator, such as dry wood, glass or sealing-wax. With this brief outline of the action of electricity it will appear that there are two ways in which a good conductor may offer protection to a building. By putting a metallic rod, connected with the earth, on the building, a powerful discharge may be safely carried to the ground without damaging the wood-work or injuring the inmates. It is a well known fact that the electric current will always prefer a good conductor to a poor one. It will not touch the wood if a good metallic conductor is provided to carry it to earth. Again, it is well known that pointed objects will not long retain a charge of electricity. From the points it rapidly passes into the surrounding air. Hence, a metallic conductor fastened directly to a building, with its upper end pointed, will rapidly discharge the negative electricity from the upper portion, and thus lessen, somewhat, the attraction between the cloud and the building. If metallic bodies on a building be not connected immediately with the rod then there is no opportunity for their free electricity to pass off by the pointed rod. If the lightning "strikes" there is danger of lateral discharges from the rod to all metallic masses not connected therewith. An electric charge has been known to leave a lightning-rod and go through a twenty inch brick wall in order to strike a water-pipe inside a building. This occurred because the rod was poorly "grounded," and the pipe offered the best path to moist earth. Originally it was thought that by using glass insulators the lightning could be made to follow the rod directly to earth and not touch the building. But the insulators are useless for two reasons. In the first place, an inch or even a foot of glass would not prevent, in the slightest degree, the charge from passing from the rod to the house if the rod be not well connected with moist earth. It is absurd to suppose that after the electricity has passed through one-half or one-fourth a mile of air it is to be stopped by a few inches of glass! Again, after once being wetted the glass becomes a conductor. Until being wetted it prevents the free electricity of the house from passing to the rod and thence escaping into the air. Hence, the glass insulators are useless, to say the

least. Lightning-rod men still use them, either because they have not yet found out that they have long been discarded by scientific men, or because they figure in the long list of items on which erroneous profits can be made.

#### THE CHAMBER'S LIGHTNING-ROD.

This is a novelty in the way of a lightning-rod in that it is not connected with the earth and is mounted upon large umbrella shaped glass insulators. It is placed upon the ridge of the building and is pointed and turns upward at both ends. The inventor seems to think that by using insulators about ten inches long, the lightning can be prevented from striking the house and made to "diffuse back into the air." From the theory just given of the action of electricity, it will be evident to all candid minds that such an arrangement is lacking in all the essential elements of a lightning protector. This rod is actually being used in Iowa and many of the United States, and therefore a serious consideration of its deficiencies will not be out of place. The Chamber's rod is owned by a corporation which manages to get recommendations from prominent unscientific persons by means of ingeniously contrived experiments, and then the rod is sold on the strength of these testimonials. It is creditable to the scientific men of the country that no man having a reputation to lose has given it any support. The "*experiments*" by which so many are induced to testify to their belief in the rod, consist in an ingenious use of the balls and points. In the first place the experimenter uses a frictional electrical machine without condensers. Hence the spark used is so weak that it is no illustration of the actual state of things. Again, the instrument used in the experiments to illustrate the Chamber's rod, is so large compared with the electrified conductor, which represents the cloud, that it is no illustration at all. But in order to show the utter worthlessness of such a rod, the following experiment was devised:

A small wooden *thunder house*, about three inches long and three inches high, was provided with a rod on the plan of the Chamber's. Ebonite insulators were used. In the end of the house were a number of holes into which a brass plug with a knob on the end could be stuck. This knob, by means of a chain, was connected with a metal plate on which the house stood. The distance from the lightning rod on the house to the brass plug, could be made from one-half an inch to two inches, with nothing but dry wood between. The negative pole of a powerful Holtz machine was then connected with the metallic plate



under the house and the positive pole brought over the house from one to two inches from the rod. Large condensers were used, and the spark at each discharge struck the pointed rod and then darted straight to the brass knob and thence to the plate. Or, sometimes it went down through the roof straight to the plate. On filling a bomb with hydrogen and air and placing it in the circuit with a short break, the house was blown up when the spark passed! But the "scientific" men who experiment for the Chamber's company say that when the lightning strikes the rod at one end it should "*diffuse*" into the air by the other point! It seems almost like a waste of paper to expose such a patent imposition, but as the owners of this so-called "protector" are very persistent in pushing it before the public, I have been at some trouble to procure opinions from many eminent men as to the value of the "*Chamber's Lightning Protector*." Many of these have already been extensively published, but it is not likely to do any harm, but rather good, to keep the matter before the people.

In September, 1879, a printed circular was sent to a large number of the most eminent physicists asking questions respecting the best method of putting up lightning rods, and also requesting opinions of the Chambers's rod. Following are the opinions of this rod:

*From President Morton, of Stevens' Institute of Technology, Hoboken, N. J.*—"A dangerous attachment, liable to cause damage from lightning."

*From Professor Loomis, of Yale College.*—"Very dangerous. It is of no value whatever for protection, and so far as it produces any effect it would tend to attract the lightning from the clouds without affording any medium for transmitting the electricity safely to the earth. Nobody but a charlatan would recommend a lightning rod which has no metallic connection with the earth."

*From Professor Young, of Princeton College.*—"If it has no thorough connection with the ground it is worse than useless; an absolute invitation of danger."

*From Professor Rowland, of John Hopkins' University, Baltimore.*—"It is the worst humbug which has appeared in that line, and the proprietors of the patent should be arrested for selling the rod under the false pretense that it will protect a building."

*From Professor Clarke, of Cincinnati University.*—"It is absolutely useless. In theory it rests upon total misapprehension of some of the simplest physical laws. I have investigated it thoroughly. I have seen the Chambers experiments and know that no scientific man would indorse it for a moment."

*From Dr. Kedzie, of Michigan Agricultural College.*—"It is a scientific humbug."



*From Professor Anthony, Cornell University, Ithaca, N. Y.*—"It is worse than useless. It would increase the danger."

*From Professor Harvey, of Arkansas University.*—"My opinion is that it might be ornamental, but that it is worthless if not dangerous. Better have nothing at all."

*From Professor Rood, Columbia College, N. Y.*—"Worse than useless."

*From Professor Trowbridge, Harvard College.*—"I think it is a humbug. For the discharge would not respect the details between the rod and the building. Moreover, the electrical discharge will not necessarily strike such a rod in preference to the larger conductor which the house or building affords."

*From T. A. Edison.*—"Do not wish to be drawn into any controversy on the subject, but will simply state that the rods on my buildings all connect with the earth."

*From Professor Davies, Wisconsin University.*—"I should regard it as I regard much of the iron ornamental work put upon towers and around houses, *i. e.*, as adding to the risk of being struck by lightning."

*From Professor Silliman, Yale College.*—"That it is in flagrant violation with every accepted principle of electrical science, and should be prohibited if need be by legislative enactment."

*From Professor Todd, Tabor College.*—"I should think it admirably planned for drawing the electric discharge through the building."

*From Professor LeConte, University of California.*—"Such rods would afford no protection; on the contrary they would be *dangerous*."

*From Professor Newcomb, U. S. Naval Observatory.*—"If it has no connection with the ground I should not like to be under it during a thunder storm."

*From Professor Pickering, Harvard Observatory.*—"I should not use it."

*From Professor Mayer, Stephens' Institute of Technology.*—"From the description given by sentence, 'It is supported,' etc., to (.) period, I should say that the Chambers rod is utterly useless."

*From Professor Hinrichs, Iowa State University.*—"I have personally examined the Chambers rod. It is no lightning-rod in the ordinary sense of the word. I do not see any valid reason why such a contrivance should constitute a lightning protector. By pulling up any of the old-style rods from the dry ground into which it has been stuck, and turning this end up toward the sky, it will make about as good a 'protector' as the Chambers protector, whether insulated or not. The insulator furnished by the company is anyhow insufficient."

*From Professor Le Roy Brown, Vanderbilt University, Nashville, Tenn.*—"Not only useless but dangerous. For when glass insulators are wet by rain they conduct electricity, and thus the house would have a pointed rod without ground connection."

*From Professor Safford, Williams College, Mass.*—"Worthless; will not even protect from lightning rod men."

*From Professor O. N. Rood, Columbia College, N. Y.*—"Worse than useless."

*From Professor Weed, Michigan University.*—"Either a new and economical discovery, or an ignorant and misleading device that will do more harm than good. I do not believe it to be the first of these."

The following replies were received from men to whom circulars issued by the company were sent. In one of them Professor Tyndall's name was used after a short quotation from one of his books, intended to support the Chambers rod.

ROYAL INSTITUTION OF GREAT BRITAIN, }  
October 21, 1879. }

DEAR SIR:—I have received your letter referring to the "Chambers lightning-rod." I have also received a circular in which a building provided with the rod is represented. This circular, moreover, contains a quotation from a small work of mine, intended, I suppose, to support the Chambers conductor.

Wanting a *good* earth connection the conductor is worse than useless. Instead of protecting buildings it is, in my opinion, calculated to promote their destruction. That the electricity should freely stream from the points as represented in the figure, a channel must exist to convey it freely from the earth to the points. Without this the building is liable at any moment to disruption.

Yours faithfully,

JOHN TYNDALL.

*From Professor Anthony, Cornell University, N. Y.*—"DEAR SIR:—Yours of 24th inst. at hand. The lightning rod described in the circular you send is certainly no protection whatever to a building. I am surprised that it should have been indorsed by any one who had any knowledge whatever of electrical science. You do well to warn the public against its use."

*From Professor Baird, Secretary Smithsonian Institute.*—"SIR:—In reply to your inquiry concerning lightning rods, I have to say that while this institution does not undertake to criticise the various projects contrived by ignorance or dishonesty for deluding the public, I have no hesitation in giving you my opinion that the lightning rod referred to is arranged on wholly mistaken and unscientific principles. The quotation from Prof. Maxwell, of London, suggesting the theoretical but not very practical condition of surrounding a building, 'roof, walls and ground floor, with sheet copper,' is entirely misapprehended, and in its misapplication is well calculated to deceive the uninformed reader. An insulated rod with its opposite ends upturned, attached to the roof, is certainly as dangerous an appliance as could well be devised. With scattered iron or metallic masses through the house (such as almost always exist), with detached iron pipes outside, and perhaps water or gas-pipes in different rooms, or with even the imperfect conductors—human beings in upper and lower stories, such a contrivance

would, during a near thunder storm, almost infallibly invite a damaging and disruptive discharge, and is in fact the very arrangement frequently exhibited in the lecture-room as a class experiment to show the igniting and explosive effects of electricity, when a 'protecting' conductor is not continuous. \* \* In conclusion it may be stated that in a letter addressed to Josiah Morrow (Lebanon, Ohio), dated April 22, 1878, Prof. Henry, commenting on the very lightning rod in question, used the language: 'In my opinion a rod put up in this manner is worse than none at all.'

I call especial attention to the last letter because the agents of the company claim that Professor Henry endorsed the Chamber's system of rodding buildings. It seems that one of the last acts of his long and busy life was to condemn that rod as worse than none at all. All men who are competent to give an opinion of this rod unanimously condemn it as "useless" and even "dangerous." There are no dissenting opinions on the question. And yet the agents are plying their trade all over our State and vending these dangerous instruments wherever they can find people who are ignorant or foolish enough to be deceived by their "experiments." Surely our Legislature will not do its duty until it enacts a law prohibiting the sale of this rod in Iowa.

#### HOW LIGHTNING RODS SHOULD BE PUT UP.

The rods usually sold by peddlers are entirely too small. There should be four or five times as much metal in the rods as is generally put in them. Twisted and fented rods, as well as wide strips of metal are a delusion and a snare. They are only equal as conductors to a round rod having the same weight of metal per foot.

*Size of Conductor*—It should be from three-fourths of an inch to an inch in diameter, of solid iron. *The larger it is, the better.* A bar of solid half-inch square iron would be much better, however, than many of the rods put up on houses. The form of the cross-section is immaterial so the rod contains the requisite amount of metal, since the capacity of a rod to carry away a discharge, without melting, depends on the area of the cross-section, and not on the surface. If copper is used the rod need not be more than one-half or one-third as large as for iron.

*Insulators of glass*—These are useless if not harmful. Fasten the rod directly to the building with iron or copper straps, or staples. If there is a metallic roof or large masses of metal about the building, fasten the rod to them at their highest points. Fasten also to any large water pipes or gas mains in the building at the highest points.

*Ground connection*—This should be perfect. There is no question on this point. Damage from lightning, on buildings having rods, can generally be traced to a dry earth connection. If the rod simply sticks into dry earth a few feet it is useless. Better take it down. The way in which rods are too frequently put up, has brought disgrace on the name of Science. Dig a trench deep enough to strike permanently moist earth. Fasten a mass of old metal to the end of the rod, or surround it with pounded charcoal, cover up and all will be well. Or, fasten to a large water main, always turning the rod away from the house. The usual method practiced, of simply driving the rod down straight into the earth from three to eight feet, *has never been advocated by scientific men*. A well is an excellent terminus for the rod, but not a cistern. Let the upper end terminate in a point, not too sharp, and place one at each chimney, or ventilator, if a barn, and one at each gable, making the rods six to eight feet high, and near enough so each rod will protect a diameter of four times its height. Connect all the rods together, and also solder to metallic eave-troughs which may be near them. If the point of the rod can be gilded, or tipped, with copper or platinum, it would be well. All joints should be welded or fastened with close fitting screws, and the whole covered with a coat of black paint. Make all metallic connections by means of strips of copper or copper wire.

A continuous cable, made by twisting together from ten to twenty large fence wires would make a good rod. At the top the wires may be spread apart and pointed. In fact, I am convinced that six common fence wires, twisted together, would make about as good a lightning-rod as those usually sold. Avoid making sharp turns with the rod.

*Cost of a rod*—I present the following rough estimate of a good lightning-rod. Of course, the exact cost will vary to suit changes in locality and price of iron.

100 feet of $\frac{3}{4}$ in. rolled iron (150 lbs @ 5 cts).....	\$7.50
Copper point.....	.50
Painting.....	.50
Coupling or welding.....	1.00
	<hr/>
	\$9.50
The cost of putting up, and of a blacksmith to bend and weld where necessary, should not exceed.....	\$ 2.50
	<hr/>
Total cost per hundred feet.....	\$12.00

If one point is put at each gable-end and chimney, and all connected together, one conductor of three-fourths of an inch iron is enough to run to the ground. I am told that the cost per hundred feet when put up by average lightning-rod agents, is from \$40 to \$75 per hundred feet. No wonder they are anxious to sell their rods when the profits are so enormous. Whether our people should put rods on their houses or not, I shall not discuss. Statistics show that when properly put up, lightning-rods do protect objects from the effects of the direct discharge. The damage to ships in the English navy used to be very great until Snow Harris put copper strips on the masts and fastened them to the copper bottoms of the vessels. Since then the damage from lightning has been merely nominal, and Mr. Harris was conferred the honor of knighthood and given an annuity of \$1,500 for his services. For statistics on this question see Arago's *Meteorology*. Lightning-rods are genererally put up, not because the owner of the house has made up his mind to have one, but because some lightning-rod peddler has made up his mind to sell him a rod. If rods are to be put up at all let it be done on scientific principles.



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# APPENDIX.

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## THE BOARD OF TRUSTEES.

The subjoined list comprises the Board of Trustees, their officers, committees and the Board of Instruction:

THE HON. BUEL SHERMAN, Fredricksburgh,	-	-	1880.
THE HON. G. H. WRIGHT, Sioux City,	-	-	1880.
THE HON. JOHN N. DIXON, Oskaloosa,	-	-	1882.
THE HON. H. G. LITTLE, Grinnell,	-	-	1882.
THE HON. WILLIAM MCCLINTOCK, West Union,	-	-	1882.

## OFFICERS OF THE BOARD.

THE HON. JOHN N. DIXON, Oskaloosa,	-	-	CHAIRMAN.
E. W. STANTON, Ames,	-	-	<i>Secretary.</i>
W. D. LUCAS, Ames,	-	-	<i>Treasurer.</i>
J. I. GEDDES, Ames,	-	-	<i>Deputy Treasurer.</i>

## STANDING COMMITTEES.

*Executive Committee*—Trustees WRIGHT, LITTLE, and McCLINTOCK.

*Committee on Farm*—Trustees LITTLE, McCLINTOCK, and SHERMAN.

*Committee on Horticulture*—Trustees SHERMAN, DIXON, and WRIGHT.

*Committee on Workshop*—Trustees WRIGHT and McCLINTOCK.

*Committee on Forfeited Lands*—Trustees WRIGHT and SHERMAN.

## MEETINGS.

The annual meeting of the Board of Trustees is held on the second Wednesday in November; the other meetings are held in the latter part of November and in May.

## OFFICERS OF INSTRUCTION.

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**A. S. WELCH, LL. D., PRESIDENT,**

**Professor of Psychology and Philosophy of Science.**

**GEN. J. L. GEDDES, M. PH., PRESIDENT *pro tem.*,**

**Professor of Military Tactics and Engineering.**

**W. H. WYNN, A. M., Ph. D.,**

**Professor of English Literature.**

**C. E. BESSEY, M. S., Ph. D.,**

**Professor of Botany.**

**A. THOMSON, C. E.,**

**Professor of Mechanical Engineering, and Superintendent of the Workshop.**

**F. E. L. BEAL, B. S.,**

**Professor of Civil Engineering.**

**T. E. POPE, A. M.,**

**Professor of Chemistry.**

**M. STALKER, B. S., V. S.,**

**Professor of Veterinary Science.**

**J. L. BUDD, M. H.**

**Professor of Horticulture.**

**J. K. MACOMBER, B. S.,**

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**Professor of Practical and Experimental Agriculture.**

**D. S. FAIRCHILD, M. D.,**

**Professor of Histology, Pathology, and Therapeutics, and College Physician.**

**MRS. MARY B. WELCH, PRECEPTRESS,**

**Lecturer on Domestic Economy.**

**J. S. LEE, B. S.,**

**Assistant Professor in Chemistry.**

**MISS MARTHA SINCLAIR, ASSISTANT PRECEPTRESS,**  
**Instructor in French and English.**

**J. C. HIATT,**  
**Superintendent of the Farm.**

**T. L. SMITH, B. S.**  
**Foreman in the Work-shop and Lecturer on Architecture.**

**F. W. BOOTH, B. S.,**  
**Foreman and Instructor in the Printing Office, and**  
**Assistant in Mathematics.**

**C. F. MOUNT, C. E.,**  
**Assistant in Civil Engineering.**

**WINIFRED M. DUDLEY, B. S.,**  
**Teacher of Instrumental Music.**

**G. S. FOX,**  
**Teacher of Vocal Music.**

**MRS. A. THOMSON,**  
**Housekeeper and Assistant in Experimental Kitchen.**

**H. D. HARLOW,**  
**Proctor.**

### **JUDICIARY.**

**The PRESIDENT; Professors GEDDES, WYNN, BESSEY, THOMSON,**  
**BEAL, POPE, STALKER, BUDD, MACOMBER, STANTON, KNAÏP and**  
**MRS. WELCH.**

## GRADUATES.

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### GRADUATES OF 1878.

Gentlemen .....	15
Ladies .....	6
Total.....	21

### GRADUATES OF 1879.

Gentlemen.....	15
Ladies .....	6
Total.....	21

### SENIORS OF 1879.

Gentlemen .....	16
Ladies .....	7
Total.....	23

### JUNIORS OF 1879.

Gentlemen .....	21
Ladies .....	6
Total.....	27

### SOPHOMORES OF 1879.

Gentlemen .....	31
Ladies .....	17
Total .....	48

### FRESHMEN OF 1879.

Gentlemen .....	75
Ladies .....	32
Total....	107

### SPECIAL STUDENTS OF 1879.

Gentlemen .....	2
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SUB-FRESHMEN OF 1879.

Gentlemen .....	49
Ladies .....	21
Total .....	<u>70</u>

POST GRADUATES OF 1879.

Gentlemen . . . . .	3
Ladies .....	4
Total .....	<u>7</u>

## COUNTY REPRESENTATION.

Adair . . . . .	1	Jasper . . . . .	6
Allamakee . . . . .	2	Johnson . . . . .	1
Audubon . . . . .	2	Jones . . . . .	9
Benton . . . . .	5	Keokuk . . . . .	11
Boone . . . . .	11	Linn . . . . .	2
Bremer . . . . .	4	Mahaska . . . . .	1
Calhoun . . . . .	4	Marion . . . . .	2
Carroll . . . . .	2	Marshall . . . . .	7
Cass . . . . .	6	Mills . . . . .	1
Cedar . . . . .	6	Mitchell . . . . .	1
Cerro Gordo . . . . .	3	Monona . . . . .	2
Cherokee . . . . .	3	Montgomery . . . . .	1
Chickasaw . . . . .	2	Page . . . . .	1
Clay . . . . .	3	Palo Alto . . . . .	2
Clayton . . . . .	3	Pocahontas . . . . .	1
Clinton . . . . .	8	Polk . . . . .	26
Crawford . . . . .	4	Pottawattamie . . . . .	1
Dallas . . . . .	6	Poweshiek . . . . .	5
Decatur . . . . .	2	Ringgold . . . . .	1
Delaware . . . . .	6	Scott . . . . .	6
Des Moines . . . . .	5	Sioux . . . . .	1
Dubuque . . . . .	3	Story . . . . .	56
Fayette . . . . .	3	Taylor . . . . .	2
Floyd . . . . .	8	Wapello . . . . .	6
Franklin . . . . .	1	Warren . . . . .	1
Greene . . . . .	2	Washington . . . . .	1
Grundy . . . . .	1	Wayne . . . . .	1
Guthrie . . . . .	2	Webster . . . . .	1
Hamilton . . . . .	1	Winneshiek . . . . .	1
Hardin . . . . .	6	Woodbury . . . . .	2
Harrison . . . . .	3	Worth . . . . .	1
Henry . . . . .	1	Wright . . . . .	2
Humboldt . . . . .	2		
Jackson . . . . .	1		
		Total . . . . .	284
		Counties represented . . . . .	66

## HISTORICAL.

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### APPENDED ARE THE ORIGIN AND LAWS ESTABLISHING THE AGRICULTURAL COLLEGE.

THE IOWA AGRICULTURAL COLLEGE was formally opened on the 17th of March, 1869. It will, consequently, at the close of the present term complete its eleventh year.

In 1858 the Legislature of Iowa passed an act to establish an Agricultural College for the purpose of giving a higher education to the industrial classes. By the same act means were provided for the selection of a farm, the location of College buildings, and for experimentation in agriculture. In 1859, a farm of six hundred and forty acres, situated in Story county, near Ames, was selected and purchased for the use of the College. In 1862 a bill was passed by Congress donating public lands to the several States which may provide Colleges for the benefit of agriculture and the mechanic arts.

The Ninth General Assembly, convened in extra session by proclamation of the Governor, passed an act—approved September 11, 1862—entitled, “*An act to accept the grant and carry into execution the trust conferred upon the State of Iowa by an act of Congress, entitled ‘An act granting public lands to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts, approved July 2, 1862.’*” The State thereby accepted the grant upon the conditions and under the restrictions contained in said act of Congress, and required the Governor to appoint an agent to select and locate the land granted in said act, requiring said agent to report to the Governor and making it the duty of the Governor to lay a list of selections before the Board of Trustees of the Iowa Agricultural College at their next meeting for their approval, etc.; and appropriating \$1,000 to carry out the provisions of the act. (Acts Ex. Session. 1862, p. 25.)

The act accepting the Congressional grant under the conditions imposed, made the College a National Institution—the State becoming the trustee in charge.



In 1864 the lands, previously selected, amounting to 204,309 acres, were reported to the Legislature and confirmed by enactment as the perpetual endowment of the Agricultural College.

At the same session of the Legislature in which this munificent endowment was confirmed to the Agricultural College, Governor Kirkwood and Senators Gue and Clarkson formed a scheme for realizing an immediate fund by leasing the lands instead of offering them for sale. This scheme was approved by the Legislature and passed into a law which authorizes the trustees to lease for a term of ten years any of the endowment lands. The lessee, by the terms of the act, pays annually in advance eight per cent interest on the appraised value of the land, with a right to purchase at the expiration of the lease. In the case of failure in the prompt payment of the interest when due, the land with all improvements reverts to the College.

Annexed is the full text of the Congressional law passed 1862, granting lands to colleges of agriculture and the mechanic arts:

*"Be it enacted by the Senate and House of Representatives of the United States, in Congress assembled,* That there be granted to the several states for the purpose hereinafter named, an amount of the public land, to be apportioned to each State, a quantity equal to thirty thousand acres for each Senator and Representative in Congress to which the States are respectively entitled, by the apportionment under the census of 1860; *Provided,* That no mineral lands shall be selected under the provisions of this act.

SEC. 2. *And be it further enacted,* That the land aforesaid, after being surveyed, shall be apportioned to the several States in sections or subdivisions of sections not less than one quarter of a section; and whenever there are public lands in a State subject to sale at private entry at one dollar and twenty-five cents per acre, the quantity to which said State shall be entitled shall be selected from such lands within the limits of such State, and the Secretary of the Interior is hereby directed to issue to each of the States in which there is not the quantity of public lands subject to sale at private entry at one dollar and twenty-five cents per acre, to which said State may be entitled under this act, land-scrip to the amount in acres for the deficiency of its distributive share; said scrip to be sold by said States and the proceeds thereof to be applied to the uses and purposes prescribed in this act, and for no other use or purpose whatever; *Provided,* that in no case shall any State to which land-scrip may thus be issued, be allowed to locate the same within the limits of any other State, or any territory of the United States, but their assignee may thus locate said land-scrip upon any of the unappropriated lands of the United States subject to sale at private entry at one dollar and twenty-five cents or less per acre; and *Provided further,* That no more than one million acres shall be located by such assignee in any of the

States; and *Provided further*, That no such location shall be made before one year from the passage of this act.

SEC. 3. *And be it further enacted*, That all the expenses of management, superintendence, and taxes from date of selection of said lands previous to their sale, and all the expenses incurred in the management and disbursement of the moneys which may be received therefrom, shall be paid by the State to which they may belong, out of the treasury of said State, so that the entire proceeds of the sales of said lands shall be applied without any diminution whatever to the purposes hereinafter mentioned.

SEC. 4. *And be it further enacted*, That all moneys derived from the sale of the lands aforesaid by the States to which the lands are apportioned, and from the sale of land-scrip hereinbefore provided for, shall be invested in stocks of the United States, or of the States, or some other safe stocks, yielding not less than five per centum upon the par value of said stocks; and that the money so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished, (except so far as may be provided in section five of this act), and the interest of which shall be inviolably appropriated by each State, which may take and claim the benefit of this act to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.

SEC. 5. *And be it further enacted*, That the grant of land and land-scrip hereby authorized shall be made on the following conditions, to which, as well as to the provisions hereinbefore contained, the previous assent of the several States shall be signified by legislative acts:

*First.*—If any portion of the fund invested as provided by the foregoing section, or any portion of the interest thereon shall, by any action or contingency, be diminished or lost, it shall be replaced by the State to which it belongs, so that the capital of the fund shall remain forever undiminished, and the annual interest shall be regularly applied, without diminution, to the purposes mentioned in the fourth section of this act; except that a sum not exceeding ten per centum upon the amount received by any State under the provisions of this act, may be expended for the purchase of lands for sites of experimental farms, whenever authorized by the respective legislatures of said States.

*Second.*—No portion of said fund nor the interest thereon, shall be applied directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings.

*Third.*—Any State which may take and claim the benefit of the provisions of this act *must* provide, within five years at least, not less than one college, as described in the fourth section of this act, or the grant to such State shall cease; and said State shall be bound to pay the United States the amount re-

ceived of any lands previously sold, and that the title to purchasers under the State shall be valid.

*Fourth.*—An annual report shall be made regarding the progress of each college, recording any improvements and experiments made, with their cost and result, and such other matters, including State, industrial and economical statistics, as may be supposed useful; one copy of which shall be transmitted by mail free by each to all the other colleges which may be endowed under the provisions of this act, and also one copy to the Secretary of the Interior.

*Fifth.*—When lands shall be selected from those which have been raised to double the minimum price in consequence of railroad grants, they shall be computed to the State at the maximum price and the number of acres proportionately diminished.

*Sixth.*—No state while in a condition of rebellion or insurrection against the government of the United States shall be entitled to the benefit of this act.

*Seventh.*—No State shall be entitled to the benefits of this act, unless it shall express its acceptance thereof by its legislature within two years from the date of its approval by the President.

SEC. 6. *And be it further enacted*, That land-scrip issued under the provisions of this act, shall not be subject to location until after the first day of January, 1863.

SEC. 7. *And be it further enacted*, That the land officers shall receive the same fees for locating land-scrips issued under the provisions of this act, as is now allowed for the location of Military Bounty Land Warrants under existing laws; *Provided*, Their maximum compensation shall not thereby be increased.

SEC. 8. *And be it further enacted*, That the Governors of the several States to which scrip shall be issued under this act, shall be required to report annually to Congress all sales made of such scrip until the whole shall be disposed of, the amount received for the same, and what appropriation has been made of the proceeds.—(U. S. Stat. 1861-2, p. 503.)

For easy reference by those who desire to gain a complete knowledge of this National Institution, which is under the care of the State, we subjoin the entire laws of the General Assembly relating to its organization and management taken from the Code:

COLLEGE AND FARM CONTROLLED BY A BOARD OF FIVE TRUSTEES.

SECTION 1604. The lands, rights, powers, and privileges, granted to and conferred upon the State of Iowa by the act of Congress entitled, "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, are hereby accepted by the State of Iowa, upon the terms, conditions, and restrictions contained in said act, and there is hereby established an

Agricultural College and Model Farm, to be connected with the entire agricultural and mechanical interests of the State; the said college and farm to be under the control and management of a board of five trustees, no two of whom shall be elected from the same congressional district.

THE BOARD—HOW ELECTED—WHO IS INELIGIBLE.

SEC. 1605. The present board of trustees shall continue in office until the first day of May, A. D. 1874, and the General Assembly at their regular session in said year, shall elect three trustees to serve for four years, and two trustees to serve for two years from the first day of May, A. D. 1874; and the General Assembly at each regular session thereafter shall elect the number of trustees which may be necessary to keep the board full. Any vacancies in said board caused by death, removal from the district or State, resignation, or failure to qualify within sixty days after election, may be filled by appointment by the Governor; *Provided*, That neither the president nor any other officer or employe of the college and farm, nor any member of the General Assembly, shall be eligible as such trustee.

POWERS OF THE BOARD.

SEC. 1606. The board of trustees shall have power:

1. To elect a chairman from their own number, a president of the college and farm, a secretary, a treasurer, professors and other teachers, superintendents of departments, a steward, a librarian, and such other officers as may be required for the transaction of the business of the board; also to fix the salaries of officers and prescribe their duties; and to appoint substitutes who shall discharge the duties of such officers during their temporary absence;
2. To manage and control all the property of the college and farm, whether real or personal;
3. To make all rules and regulations for the government of the college and farm;
4. To establish rules regulating the number of hours which shall be devoted to manual labor, and to fix the compensation therefor; *Provided*, no student shall be exempt from labor except in cases of sickness or other infirmity, or where students from the advanced classes may be employed as teachers;
5. To arrange courses of study and practice, and to establish such professorships as they may deem best to carry into effect the provisions of this chapter; also to prescribe conditions of admission to the college;
6. To grant diplomas, on the recommendation of the faculty, to any student who has completed either of the industrial courses prescribed by said board, or an equivalent thereof;
7. To remove any officer by a majority vote of all the members of the Board of Trustees;

8. To direct the expenditure of all appropriations which the General Assembly shall from time to time make to said college and farm, and the income arising from the Congressional grant, and from all other sources;
9. To keep a full and complete record of their proceedings, and to do such other acts as are found necessary to carry out the intent and meaning of this chapter.

#### QUORUM.

SEC. 1607. A majority of the Trustees shall be a quorum for the transaction of business.

#### COMPENSATION OF BOARD.

SEC. 1608. The Trustees shall receive as their compensation four dollars a day for each and every day actually employed in the discharge of their duties, and five cents per mile for each and every mile actually traveled on such business; *Provided*, that no member shall receive compensation for more than thirty days in each year. The Auditor of State is hereby authorized to audit and allow the claims of the Board of Trustees in accordance with this section.

#### ANNUAL MEETINGS.

SEC. 1609. The annual meetings of the Board of Trustees shall be held at the Agricultural College on the second Wednesday of November.

#### COLLEGE YEAR, AND REPORT OF TRUSTEES TO GOVERNOR.

SEC. 1610. The college year shall begin on Thursday after the second Wednesday of November of each year, and end on the second Wednesday of November of the following year. The biennial report of the Board shall be filed in the office of the Governor, not later than the first day of December preceding the regular meeting of the General Assembly. The Governor shall cause three thousand copies of the report to be printed and bound in paper and distributed as follows: one thousand copies to the Agricultural College, and the balance to be distributed as provided by chapter ten of title two of part first of this Code.

#### PRESIDENT: HIS POWER AND DUTY.

SEC. 1611. The President of the College and farm, shall control, manage, and direct the affairs of the College and farm herein established, subject to such rule as may be prescribed by the Board of Trustees, and shall report to said Board of Trustees at their annual meeting in November, and at such other times as they shall direct, all his acts as such President, and the condition of the several departments of the College and farm, together with his recommendations for the future management thereof.

**SECRETARY.**

**SEC. 1612.** The Secretary shall keep the documents and a record of the proceedings of the Board of Trustees, and conduct their official correspondence. All acts of the Board of Trustees as to the management, disposition, or use of the lands, funds, or other property of the institution, shall be entered in the record of its proceedings, and said record shall show how each member voted on each proposition. He shall also make the biennial report of the board to the General Assembly. Upon the election of any person to an office under said Board, he shall give notice thereof to the Secretary of State. He shall also keep an account with the Treasurer, charging him with all moneys paid to him from any source, and crediting him with the amounts paid out by him upon the order of the Board of Audit, which account shall be balanced monthly.

**BOARD OF AUDIT.**

**SEC. 1613.** The President and Secretary shall constitute a Board of Audit, who shall, under the rules of the Board of Trustees, examine all bills presented for payment, and no bill shall be paid without their joint endorsement thereon; *Provided*, That no bill shall be so audited for whose payment the Board of Trustees has not made appropriation; also, the said Board of Audit shall examine the Treasurer's books and vouchers monthly, and at such other times and so often as they shall deem necessary. All the proceedings contemplated in this section shall be reported by the Secretary to the Board of Trustees at each meeting thereof.

**TREASURER.**

**SEC. 1614.** The Treasurer shall receive and keep all notes and other evidence of indebtedness, contracts, and all moneys arising from the income of the Congressional grant, from the appropriations of the General Assembly, from the sales of the products of the farm, from the payments of students, and from all other sources, and shall pay out the same upon bills duly audited as above prescribed, and he shall retain such bills with the receipt for their payment as his vouchers; but no bill shall be paid for which appropriation had not been made by the Board of Trustees. He shall keep an accurate account of the revenue and expenditures of said College and farm from all sources, and in such manner that the receipts and disbursements of each and every one of the several departments thereof shall be apparent at all times, and the gains or losses in such departments shall be carefully set forth; and he shall report to the Board of Trustees at their annual meeting in November and at such other times as they shall direct. He shall also execute duplicate receipts of all money received by him, specifying the source from which received and the fund to which it belongs, one of which must be filed with the Secretary, and no receipt for money paid by him shall be valid unless the duplicate is so filed. The Treasurer shall be elected annually, and give a bond every year in double the highest amount of money



likely to be in his hands, at any one time, with such sureties as the Executive Council shall prescribe, and said bond shall be filed in the office of Secretary of State, and the Treasurer may appoint a deputy who shall reside at the College, and the Board of Trustees shall fix the compensation to be paid to such deputy, and the Treasurer shall be responsible on his official bond for all acts done by such deputy.

OFFICES OF PRESIDENT AND SECRETARY, AND OATH OF OFFICE.

SEC. 1615. The President and Secretary shall have their respective offices, at the College, and they, with the Treasurer, shall take and prescribe the oath provided in section one hundred and twenty-six, chapter nine, title two of this Code.

THE BOARD TO LEASE THE LANDS BELONGING TO THE COLLEGE.

SUBSTITUTE FOR SEC. 1616. The Board of Trustees of the Iowa State Agricultural College and farm are hereby authorized to lease the land granted to the State of Iowa by an act of Congress entitled, "An act donating public lands to the several States and Territories, which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, in amount not exceeding one hundred and sixty acres to any one person, for a term not exceeding ten years, the lessee to pay eight per cent per annum in advance upon the price of said land, which is hereby declared to be not less than fifty per cent additional to the price at which each piece of said land, respectively, was appraised by the Board of Trustees in the year 1865; and the said lessee shall have the privilege of purchasing said land at the expiration of the lease at the price aforesaid. The lessee failing to pay the interest upon said lease within sixty days from the time the same becomes due, shall forfeit his lease, together with the interest paid thereon and the improvements made on said land. The said Board of Trustees are also authorized to renew leases heretofore made for a term not exceeding ten years from the date of such renewal, the rate of interest to be eight per cent, and when leases are so renewed the lands shall be subject to assessment for taxation at the end of ten years from the date of the original lease. The Board of Trustees shall cause to be certified to the auditors of the several counties in which said lands are situated, a list of said land which may be subject to taxation as herein provided; *Provided*, That the re-leasing of this land shall be done by the Secretary of the said College without extra compensation.

MONEY ARISING FROM THE SALE OF LANDS TO BE PAID TO STATE TREASURER AND INVESTED BY HIM.

SUBSTITUTE FOR SEC. 1617. The moneys arising from the sale of said lands shall be paid into the State treasury, and shall be invested by the State Treasurer subject to the approval of the executive council, in stocks of the United States, or of the States, or some other safe stocks yielding not less than five per centum on the par value of said stocks as directed by the act of Con-

gress granting said lands, and the money arising from the interest on said stocks, on the deferred payments, and on the leases of said lands as rental thereof, shall be paid over to the Board of Trustees, and may be loaned by said Board of Trustees on good and sufficient security when not needed to defray such expenses of the College, as said moneys are legally applicable to.

#### BOARD TO APPOINT AGENTS WHO SHALL GIVE BONDS.

SEC. 1618. The Trustees are hereby endowed with all the necessary authority to appoint agents, or do any other acts necessary to carry out the provisions of the three preceding sections. But no such agent shall be appointed with authority to receive any money until he has executed a good and sufficient bond to be approved by the Trustees in a sum double the amount he will be likely to receive. And every such agent shall make a monthly statement under oath to the College Treasurer of the amount received by him, and transmit therewith all funds shown to be in his hands.

#### FREE TUITION AND PRIOR RIGHT OF COUNTIES.

SEC. 1619. Tuition in the College herein established shall be forever free to pupils from this State over sixteen years of age, who have been residents of the State six months previous to their admission. Each county in this State shall have a prior right to tuition for three scholars from such county, the remainder, equal to the capacity of the College, shall be by the Trustees distributed among the counties in proportion to the population, subject to the above rule. Transient scholars otherwise qualified may at all times receive tuition,

#### SALE OF LIQUORS, WINE, AND BEER PROHIBITED.

SEC. 1620. No person shall open, maintain, or conduct any shop or other place for the sale of wine, beer, or spirituous liquors, or sell the same at any place within a distance of three miles from the Agricultural College and farm; *Provided*, That the same may be sold for sacramental, mechanical, medicinal or culinary purposes; and any person violating the provisions of this section shall be punished, on conviction by any court of competent jurisdiction, by a fine not exceeding fifty dollars for each offense, or by imprisonment in the county jail for a term not exceeding thirty days, or by both such fine and imprisonment.

#### BRANCHES OF STUDY.

SEC. 1621. The course of instruction and practice in said College shall include the following branches: natural philosophy, chemistry, botany, horticulture, fruit-growing, forestry, animal and vegetable anatomy, geology, mineralogy, meteorology, entomology, zoology, the veterinary art, plain mensuration, leveling, surveying, book-keeping, and such mechanic arts as are directly connected with agriculture; also, such other studies as the Trustees may from time to time prescribe not inconsistent with the purposes of this chapter.



**MONEY CANNOT BE GIVEN FROM APPROPRIATION FUND.**

**SEC. 1622.** No money shall be diverted from the fund to which it belongs, or used for any other purpose than is provided by law, and any Trustee, officer, or employe of said institution who may, by vote, direction, or act, violate the provisions of this section, shall be punished by fine not exceeding one thousand dollars, or by imprisonment in the penitentiary or county jail not less than six months.

## ORGANIZATION.

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APPENDED IS A BRIEF EXHIBIT OF THE PLAN OF ORGANIZATION, WITH  
CONDITIONS OF ENTRANCE.

Under the sanction of National law, and in harmony with the plan adopted at its opening, the Agricultural College has developed four distinct general courses of study. These courses of study which the Faculty have carefully and completely revised, will afford the student a rare opportunity to gain the "liberal and practical education" required by the congressional law. No pains have been spared to form curricula that are well balanced; for while the technical studies that give to each course its special character are fully represented, there are not wanting those branches that contribute to a wider culture.

### THE COUSES OF STUDY.

1. THE COURSE IN SCIENCES RELATED TO AGRICULTURE.
2. THE COURSE IN MECHANICAL ENGINEERING.
3. THE COURSE IN CIVIL ENGINEERING.
4. THE LADIES' COURSE IN SCIENCE.

### SPECIAL COURSES.

For the purpose of giving some freedom of choice within the general courses and of meeting urgent demands outside of them, there have been organized *three special courses*:

1. COURSE FOR JUNIORS AND SENIORS IN SPECIAL INDUSTRIAL SCIENCES.
2. POST-GRADUATE COURSES OF STUDY.
3. THE PRELIMINARY COURSE.

### SCHOOLS.

In order to attain a complete system the four general courses above mentioned, have been divided into twelve Schools, each embracing either a single prominent science or a small number of closely related sciences:

1. SCHOOL OF AGRICULTURE.
2. SCHOOL OF HORTICULTURE.
3. SCHOOL OF VETERINARY SCIENCE.
4. SCHOOL OF DOMESTIC ECONOMY.
5. SCHOOL OF MILITARY SCIENCE.
6. SCHOOL OF LITERATURE AND LANGUAGE.
7. SCHOOL OF MATHEMATICS AND PHYSICS.
8. SCHOOL OF CHEMISTRY.
9. SCHOOL OF BIOLOGY.
10. SCHOOL OF PHILOSOPHY.
11. SCHOOL OF MECHANICAL ENGINEERING AND ARCHITECTURE.
12. SCHOOL OF CIVIL ENGINEERING.

### BUILDINGS.

The COLLEGE BUILDING is four stories high above the basement, and is 158 feet long by 112 feet deep through the wings. In the basement are the dining-hall, kitchen, laundry, experimental kitchen and laundry, printing office, and armory. On the first floor are the chapel, president's office, cashier's office, and library. The second floor contains several recitation rooms and rooms for students. The third and fourth floors contain student rooms and the museum. Two hundred and twenty students can be accommodated in the building. All the rooms are heated by steam and lighted with gas. Water is supplied in all the stories.

The LABORATORY is a spacious two-story brick building, dimensions 70x44 feet, with an extension one story high, 61x33 feet. The first floor is devoted to chemistry, the second to physics, and two drawing-rooms occupy the attic. The basement contains the machine shop and a large recitation room. This building is warmed by an independent steam-heating apparatus, and is supplied with water and gas.

The departments of BOTANY and VETERINARY SCIENCE are located in a handsome brick building in the Italian style. On the first floor are the Botanical laboratory, lecture room, and the professor's room. On the second floor are found the Veterinary lecture room, museum, and professor's room. Behind this building is the Veterinary hospital and dissecting room.

The HORTICULTURAL BUILDING is a neat structure, containing on the first floor a well-furnished lecture-room, professor's room, and seed room. On the second floor is the Horticultural museum. The cellar has two spacious rooms, one for the storage of garden products, the other for the use of the nursery propagating department. A grafting

neat room and propagating structure are attached, heated with hot-water pipes.

The FARM HOUSE is a substantial, plain, brick building, occupied by the Farm Superintendent, and accommodating several students. The College Creamery is a low frame building, just east of the farm house. The farm barns are adjacent—one of brick, for horses, and one large frame barn in the basement of which is a stable for one hundred head of cattle.

The WORK-SHOP, LAUNDRY and GAS-WORKS are some distance behind the main building. The work-shop is a two-story frame building, fitted up with machinery and tools for the prosecution of repairs and for instruction in mechanical work.

Professors Budd, Thomson, Pope, and Stanton, occupy substantial houses on or near the College grounds. The president's house, a fine example of the Gothic style, is now building, and is near the entrance to the grounds.

#### REQUIREMENTS FOR ENTRANCE.

1. The age of students seeking admission to the Agricultural College must be sixteen years or over.

2. Every student on entering the College signs the following contract:

We, the Faculty of the Iowa Agricultural College, hereby agree that we will guarantee to the students of 1880, all the privileges and instructions set forth in the Seventh Biennial Report, and that the laws we make shall be simply for their advancement and the good government of the institution.

A. S. WELCH, *President*.

We, the Students, hereby agree on entering the College in 1880, that we will respect its laws, and, except in case of illness, unforeseen misfortune, or the necessity of leaving to teach school, remain the entire term on which we enter.

#### ENTRANCE EXAMINATIONS AND CERTIFICATES.

3. Candidates for membership in the Freshman class must give evidence of a thorough knowledge of English Grammar, English Analysis, Human Physiology, Arithmetic, and Algebra through simple equations. Proficiency in these studies may be proved either by actual

examinations held at the opening of the term, or by a certificate given on special examinations by either the principal of a high school or a County Superintendent. Teacher's certificates will not be received. For details of Entrance Examinations, see index.

#### ADMISSION TO SPECIAL SCHOOLS.

4. Students of the required age and preparation, may, on application to the President, pursue exclusively the course belonging to any special school; but the studies of such special student will be confined strictly to the school he enters.

#### STUDIES PREPARATORY TO ENTERING THE SCHOOL OF VETERINARY SCIENCE.

5. Young men who desire to take the course in Veterinary Science without entering the College proper, must give evidence, either by examination or the certificate above mentioned, of proficiency in all the studies required for admission to the Freshman class, except Algebra.

#### SUB-FRESHMAN CLASS.

6. For the purpose of giving a better preparation for the Freshman class to the students who come from sections of the State where the schools are defective, a limited number will receive instruction in English Analysis, History, Physiology, and the elements of Algebra and Geometry. Students entering this class must, hereafter, show by examination or certificate a thorough knowledge of English Grammar and Arithmetic.

#### HOW TO ENTER THE AGRICULTURAL COLLEGE.

Those who desire to enter the Agricultural College at the opening of the spring term, March 1, 1880, or for the fall term which commences July 21, 1880, will comply with the following directions:

1. Write the President, if possible before the first of February, asking for a *card of enquiry*. It will be mailed to you at once.

2. On receiving the card of enquiry, write an answer opposite each question in the list; then enclose and mail it to the President. If the answers you give accord with the "Requirements for Entrance," a card of admission will be sent you.

3. When you arrive at the opening of the term, present this card of admission to the Treasurer; select your room; pay the rent; make

your deposit; and, without loss of time, show your receipt therefor to the President at his office. If you have not a certificate of proficiency in the studies required, you will then secure a card of examination.

4. Attend punctually every examination at the time and place indicated on the card. When all the examinations are completed and your standing therein marked on the card, return it to the President. If you have passed the studies required with a standing of 3 or over, 4 being perfect, you will then sign the Student's Record Book and secure a *card of classification*.

5. Present the card of classification to each of the teachers having charge of the classes to which you are assigned. Get your name enrolled on the class list and attend thereafter every recitation of the term.

#### THE CARD OF ENQUIRY.

The card of enquiry to be sent on application, contains the following questions to be answered and returned by mail:

##### QUESTIONS RESPECTING MATTERS ESSENTIAL TO ADMISSION.

1. Are you sixteen years old, or older?
2. Are you proficient in the studies required for admission to the Freshman class?
3. Will you, if admitted, remain one entire term, unless prevented by sickness or unforeseen misfortune?

##### QUESTIONS NOT ESSENTIAL TO ADMISSION.

1. Do you intend to complete one of our courses of study?
2. What is your father's occupation?
3. Do you desire to pay a limited portion of your expenses in work?

#### GOVERNMENT.

The crowded buildings of the Agricultural College and the nature of its exercises, complicated as they are by manual labor, make order, punctuality, and systematic effort indispensable. This institution can therefore offer no inducements to the idler or the self-indulgent. Those, moreover, who are too independent to submit to needful authority, or too restless to accept wholesome restraint, are advised to go where the courses of study are milder and the requirements are consequently less. The education attained here is the result of energetic effort made possible by a uniform system of conduct and study. The following regulations give the institution the highest efficiency and secure to the student the largest possible return for time and expense.

1. The hours from seven to ten o'clock on week-day evenings, and from 7:30 A. M. to 12 M., and from 1 P. M. to 5 P. M. of all week-days except Saturday, are employed in study, recitation, and labor.

2. Students must attend punctually all exercises of the classes to which they belong, except in cases of illness or unavoidable detention.

3. When students have for the above reasons been absent from any exercise, they shall, in person, as soon as possible, present their reasons for such absence to the President. If absent from any recitation they shall without delay obtain from the professor in charge a written recommendation for excuse for such absence, which shall be presented to the President for approval. No one is permitted to attend a second recitation after an *unexcused* absence.

4. Students boarding and rooming in any building on the College Farm shall be subject to the same regulations as those boarding and rooming in the College building.

5. Students boarding outside the College grounds shall, so far as possible, keep study hours in their rooms. In the intervals between recitations at the College building they shall remain in the chapel, keeping such order as is essential to uninterrupted study. Access to the rooms and halls of the sections requires special permission.

6. Examinations shall be conducted in writing, when possible, upon questions proposed by the instructors of the various classes, and no special examinations will be granted except on such days as the faculty may set apart for that purpose.

7. No student shall graduate from this College who has not passed an examination and attained a standing of *three* (four being perfect) in each of the studies of the course in which he proposes to graduate. Studies which are pursued for a part of a term, or a part of the time during any term, shall be counted proportionately to such part.

#### PROHIBITORY LAWS FOR THE COLLEGE BUILDING.

1. Students may not leave the vicinity of the College building at any time without permission from the President. General permission to be absent on Saturday is granted by the President.

2. Loud talking, whistling, scuffling, gathering in halls and stair-cases, and boisterous and noisy conduct, are *at all times* forbidden.

3. During study hours, when not engaged in work or recitation, students may not leave their rooms except for unavoidable reasons.

4. At 10 o'clock P. M., lights shall be extinguished, and from this

time to the rising bell no student may be out of his room, except for serious reasons, nor shall he in any way disturb his neighbors.

5. Students shall not deface by marking, cutting, or otherwise any building, walls, or furniture belonging to the College.

6. Students shall not abstract or remove any article, whether clothing, food, furniture, tools, fruit, flowers, or any other property belonging to the College. Damage, destruction, or theft of property, when not more than one dollar in value, will be punished by fine double the amount, but when exceeding that sum the case will be handed over to the civil authorities.

7. Card playing and other games of chance, cooking, and the use of tobacco and intoxicating beverages, in any of the rooms of the College buildings, are strictly forbidden.

#### LITERARY SOCIETIES.

No literary, scientific, or other society shall be organized without the approval of the President and faculty. The existing societies, four in number, meet on Saturday evening and close their sessions at or before 10:15. Students not attending the meetings of these societies shall observe the order and quiet required on other evenings of the week.

#### PUBLIC WORSHIP AND RELIGIOUS INSTRUCTION.

The faculty require in and about the College building such quiet and decorum as are fitting to the observance of the Sabbath. Officers and students gather daily in the chapel for public worship. A Bible class, led by some older student, has its exercises on Sunday, at 1 p. m. The students' prayer meeting is held on Sunday evening, and on Sunday afternoon at 2:30 a discourse is given in the chapel by the President, Professor Wynn, or a clergyman invited for the occasion. The object of these sermons is to emphasize and enforce the precepts of the Christian religion, but, in a state institution like this, it would be manifestly improper to teach or to controvert the tenets of sectarianism.

#### STUDENTS' EXPENSES.

1. No charge is made for tuition.
2. Expenses incident to the general management of the College are paid from the College interest fund.
3. For board, washing, heating, lighting, and cleaning the College



building, students pay what the items actually cost the institution. Injury to College property, of whatever sort, will be charged to the author, when known: otherwise to the section or the entire body of students.

4. Students boarding in the College building furnish their own bedding, such as pillows, blankets, ticks, etc. All young men will be required to supply themselves with uniforms. (See School of Military Science.)

THE DINING HALL.

5. The dining hall will be opened on the evening preceding the respective days on which the spring and fall terms commence. Since the boarding department receives no aid from the State, and consequently is sustained wholly by receipts from the boarders, it cannot give gratuitous entertainment to any. Students and others bringing friends to its tables, are therefore required to pay for such twenty-five cents each meal.

DEPOSIT.

6. As security for the payment of his month's bills, each student, at the opening of the term, deposits with the Treasurer the sum of twenty dollars; and on showing the receipt therefor to the President, and signing the record, receives his card of examination or classification. This deposit will be returned on final settlement at the close of the term.

MONTHLY SETTLEMENT.

7. All bills for each month must, without fail, be settled at the Treasurer's office on the second Saturday of the month following. Those who neglect this settlement cannot, without special permission, be permitted to remain in the College.

8. The current expenses of students boarding in the building the present year are as follows. Should any changes of rates be made hereafter, for the year 1880, all applicants will be duly notified:

Board, per week.....	\$2.50
Lighting and heating, per week.....	.40
Incidentals, per week.....	.21
Room rent, per term.....	\$1.00 to 3.50
Washing, average per dozen.....	.50
Janitor's fee, for students not boarding in the building, per term .....	5.00

## TEXT BOOKS.

9. Text-books and stationery may be purchased from the College Treasurer at ten per cent advance on cost. Our stock is bought at publisher's prices.

## CARE OF MONEY.

10. Students are advised to keep their money and other valuables in the College safe. While doing all in their power to prevent losses and punish theft, the officers will not be responsible for money or articles lost or stolen from the persons or rooms of the students.

## MANUAL LABOR.

The following rules regulating manual labor have been made by the Board of Trustees. It will be seen that no student can pay more than from a third to a half of his expenses in work.

1. The manual labor required by law of students in the College, is divided into two kinds, viz: uninstrusive labor, which shall be compensated by the payment of wages; and instructive labor which shall be compensated by the instruction given and the skill acquired.

2. Uninstrusive labor shall comprise all the operations in the work-shop, garden, dining-room, printing-office, upon the farm and elsewhere, in which the work done accrues to the benefit of the College and not the benefit of the student. Instructive labor shall embrace all those operations in the work-shop, museum, laboratory, experimental kitchen, upon the farm and garden, in which the sole purpose of the student is the acquisition of skill and practice.

3. Members of the Freshman and sub-Freshman classes may engage in uninstrusive labor three hours a day four days a week, at the rate of from four to ten cents per hour.

4. The members of the higher classes shall engage in instructive labor in the presence and under the instruction of the professor in charge according to the statements made in the time-table of each of the courses of study.

5. Special details will be given by the President, on nomination by heads of departments, *to the most faithful and meritorious students of the higher classes*, at the rate of pay for instructive labor.

6. Students of the higher classes may, at their option, engage in unproductive labor at the same rate and under the same conditions as the Freshman class.

7. Students capable of acting efficiently as foremen, on appointment to such duty by the Superintendents, may receive increased pay not to exceed fourteen cents per hour.

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## THE COURSES OF STUDY.

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The following courses lately revised by the Faculty include the studies required by statute, together with those subsequently added by the Board of Trustees. [See section 1621, page 142 of this Report.]

1. THE COURSE IN SCIENCES RELATED TO AGRICULTURE.
  2. THE COURSE IN MECHANICAL ENGINEERING.
  3. THE COURSE IN CIVIL ENGINEERING.
  4. THE LADIES' COURSE IN SCIENCE.
  5. COURSE FOR JUNIORS AND SENIORS IN SPECIAL INDUSTRIAL SCIENCES.
  6. POST-GRADUATE COURSES OF STUDY.
  7. THE PRELIMINARY COURSE.
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## THE COURSE IN SCIENCES RELATED TO AGRICULTURE.

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### SPECIAL FACULTY.

#### THE PRESIDENT.

Professors KNAPP (Dean),  
STALKER,  
BESSEY,  
BUDD,  
MACOMBER,

POPE,  
BEAL.  
STANTON,  
WYNN,  
GEDDES.

### PURPOSE.

The purpose of the course in the sciences related to Agriculture, is to make scientists in the branches which are related to agriculture. It aims, moreover, to prepare students who desire it, for scientific farming. Incidentally it furnishes to all the means of attaining an education which is thoroughly practical.

### COURSE OF STUDY.

The course consists of the required antecedent studies in the Freshman year and the first term of the Sophomore year, of the general branches pursued in the Sophomore, Junior, and Senior years, and of the technical studies which predominate throughout.

### GRADUATION.

The candidate for graduation in this course must have secured a standing of at least three (four being perfect) in all the studies (not optional) of the subjoined list, and present a final thesis as required by college law.

### COURSE OF STUDY.

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#### FRESHMAN YEAR.

##### FIRST TERM.

Practical Agriculture—(2); Advanced Algebra—(5) fourteen weeks; Geometry begun—(5) four weeks; Book-keeping—(3); *Rhetoric*—(3), or *Latin*—(5), or *German*—(5); Drawing—(3); Composition—(1).

##### SECOND TERM.

Practical Horticulture—(2); Elementary Botany—(2); Descriptive Zoology—(2); Geometry—(5); *Peabody's Moral Science*—(3), or *Latin*—(5), or *German*—(5); Drawing—(3); Composition—(1).

#### SOPHOMORE YEAR.

##### FIRST TERM.

Systematic Botany—(2); General Chemistry—(3); General Zoology—(2); Plane Trigonometry—(5) nine weeks; Land Surveying—(5) nine weeks; Physics: Mechanics of Solids, Liquids, and Gases—(2).

## SECOND TERM.

Horticulture—(2); Stock-Breeding—(1); Economic Botany—(2); General Chemistry—(2); Entomology and Vertebrate Zoology—(5); Physics: Light and Sound—(3); \**Analytical Geometry*—(5).

## JUNIOR YEAR.

## FIRST TERM.

Horticulture—(1); Vegetable Physiology—(4) eleven weeks; Cryptogamic Botany—(4) seven weeks; Quantitative Chemistry—(2); Physics: Heat—(3); English Literature—(5); \**Differential and Integral Calculus*—(5).

## SECOND TERM.

Horticulture—(1); Landscape Gardening—(3) nine weeks; Farm Engineering—(3) nine weeks; Organic Chemistry—(2); Comparative Anatomy—(4); Physics: Electricity, Magnetism, and Meteorology—(2); Political Economy—(3); Dissertations.

## SENIOR YEAR.

## FIRST TERM.

Agricultural Chemistry—(2); Veterinary Science: Anatomy and Physiology—(3); Geology and Mineralogy—(5); Psychology—(5); Dissertations.

## SECOND TERM.

Veterinary Science: Physiology, Disease, Treatment, and Medicine—(4); Lectures on Foods—(1); Philosophy of Science and Sociology—(5); Science of Language—(5); Preparation of Thesis.

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 THE COURSE IN MECHANICAL ENGINEERING.
 

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## SPECIAL FACULTY.

## THE PRESIDENT.

Professors THOMSON (Dean),  
STANTON,  
BEAL,

MACOMBER,  
MISS SINCLAIR.

## PURPOSE.

The object of this course is to impart the scientific knowledge and practical skill which are essential to success in mechanical engineering.

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\*Optional to students who have an average standing of 3.75 in studies of the first term, Sophomore year.

This necessarily implies a thorough mastery of the principles of mathematics and a diligent study of their application to the construction of machines. In addition to the technical instruction given, it aims to furnish the means for obtaining a liberal and practical education.

#### COURSE OF STUDY.

It embraces the required antecedent studies of the first year and a half; also, a few general branches in the Junior and Senior years, and the entire technical course of study and practice necessary to the master workman.

#### GRADUATION.

To graduate in Mechanical Engineering requires a standing of at least three (four being perfect) in all the studies of the following list and the presentation of a final thesis.

#### COURSE OF STUDY.

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##### FRESHMAN YEAR.

###### FIRST TERM.

Practical Mechanics—(2); Advanced Algebra—(5), fourteen weeks; Geometry begun—(5), four weeks; Book-keeping—(3); *Rhetoric*—(3), or *German*—(5), or *Latin*—(5); Drawing—(3); Composition—(1).

###### SECOND TERM.

Practical Mechanics—(2); Geometry—(5); Elementary Botany—(2); Descriptive Zoology—(2); *Peabody's Moral Science*—(3), or *Latin*—(5), or *German*—(5); Drawing—(3); Composition—(1).

##### SOPHOMORE YEAR.

###### FIRST TERM.

Plane Trigonometry—(5), nine weeks; Land Surveying—(5), nine weeks; Physics: Mechanics of Solids, Liquids, and Gases—(2); General Chemistry—(3); Systematic Botany—(2); General Zoology—(2).

###### SECOND TERM.

Analytical Geometry—(5); Descriptive Geometry—(2); Spherical Trigonometry—(1); Physics: Light and Sound—(3); General Chemistry—(2).

## JUNIOR YEAR.

## FIRST TERM.

Principles of Mechanism—(5), twelve weeks; Analytical Mechanics—(5), six weeks; Stereotomy—(2), ten weeks; Shades, Shadows, and Perspective—(2), eight weeks; Model Drawing—(2); Differential and Integral Calculus—(5); Physics: Heat—(3).

## SECOND TERM.

Theoretical and Applied Mechanics—(5); Physics: Electricity, Magnetism, and Meteorology—(2); Political Economy—(3); French—(5); Dissertations.

## SENIOR YEAR.

## FIRST TERM

Principles of Mechanism—(5); Theory of Motors—(5), nine weeks; Mechanical Drawing—(2); French—(5); Psychology—(5); *Geology and Mineralogy*—(5); Dissertations.

## SECOND TERM.

Prime Movers—(5); Mechanical Designing—(2); Philosophy of Science and Sociology—(5); French—(5); Preparation of Thesis.

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 THE COURSE IN CIVIL ENGINEERING.
 

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## SPECIAL FACULTY.

## THE PRESIDENT.

Professors BEAL (Dean),  
MOUNT,  
STANTON,

THOMSON,  
MACOMBER,  
MISS SINCLAIR.

## PURPOSE.

It is the object of this course to educate and thoroughly train the student for the work of the Civil Engineer. It furnishes a thorough and practical course of instruction in the application of the mathematical and physical sciences to the profession of Civil Engineering. It is necessarily based upon a systematic drill in pure mathematics and includes in common with the other courses the studies necessary to a liberal education.

## COURSE OF STUDY.

The course of study embraces the antecedent studies of the first three terms and a limited number of general branches in the last two years. It comprises a full course of technical study and practice preparatory to Civil Engineering.

## GRADUATION.

A standing of at least three (four being perfect) in all the studies of the course, and a final thesis, are the conditions of graduation.

## COURSE OF STUDY.

## FRESHMAN YEAR.

## FIRST TERM.

Practical Mechanics—(2); Advanced Algebra—(5) fourteen weeks; Geometry begun—(5) four weeks; Book-keeping—(3); *Rhetoric*—(3), or *German*—(5), or *Latin*—(5); Drawing—(2); Composition—(1).

## SECOND TERM.

Practical Mechanics—(2); Geometry—(5); Elementary Botany—(2); Descriptive Zoology—(2); *Peabody's Moral Science*—(3), or *Latin*—(5), or *German*—(5); Drawing—(2); Composition—(1).

## SOPHOMORE YEAR.

## FIRST TERM.

Plane Trigonometry—(5) nine weeks; Land Surveying—(5) nine weeks; Physics: Mechanics of Solids, Liquids, and Gases—(2); General Chemistry—(3); Systematic Botany—(2); General Zoology—(2).

## SECOND TERM.

Analytical Geometry—(5); Descriptive Geometry—(2); Spherical Trigonometry—(1); Physics: Light and Sound—(3); General Chemistry—(2).

## JUNIOR YEAR.

## FIRST TERM.

Railroad Surveying—(5) twelve weeks; Analytical Mechanics—(5) six weeks; Stereotomy—(2) ten weeks; Shades, Shadows, and Perspective—(2) eight weeks; Model Drawing—(2); Differential and Integral Calculus—(5); Physics: Heat—(3).



## SECOND TERM.

Theoretical and Applied Mechanics—(5); Astronomy—(2); Political Economy—(3); French—(5); Dissertations.

## SENIOR YEAR.

## FIRST TERM.

Roof and Bridge Structures—(5); Geology and Mineralogy—(5); Psychology—(5); French—(5); Dissertations.

## SECOND TERM.

Roof and Bridge Structures—(5); Designing—(2); Philosophy of Science and Sociology—(5); French—(5); Preparation of Thesis.

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 THE LADIES' COURSE IN SCIENCE.
 

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## SPECIAL FACULTY.

## THE PRESIDENT.

MRS. WELCH (Dean).  
MISS SINCLAIR,  
Professors GEDDES,  
WYNN,

POPE,  
BESSEY,  
MACOMBER,  
STANTON.

## PURPOSE.

The studies comprised in the ladies' course have been selected with reference simply to their value, as pre-requisites to a thoroughly practical education, embracing a well balanced variety of subjects. This course is designed to confer a culture that is at once solid and available.

## COURSE OF STUDY.

It is composed of the antecedent studies of the first three terms, the most approved branches of science and literature in the last five terms, and the study and practice required for systematic house-keeping.

## GRADUATION.

A standing of at least three (four being perfect) and a final thesis as required by College law, are the conditions of graduation in this course.

## COURSE OF STUDY.

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### FRESHMAN YEAR.

#### FIRST TERM.

Advanced Algebra—(5) fourteen weeks; Geometry begun—(5) four weeks; Book-keeping—(3); *Rhetoric*—(3), or *Latin*—(5), or *German*—(5); Drawing—(3); Composition—(1).

#### SECOND TERM.

Elementary Botany—(2); Descriptive Zoology—(2); Geometry—(5); *Peabody's Moral Science*—(3), or *Latin*—(5), or *German*—(5); Drawing—(3); Composition—(1).

### SOPHOMORE YEAR.

#### FIRST TERM.

\* *Plane Trigonometry*—(5) nine weeks; History—(2) nine weeks; Systematic Botany—(2); General Chemistry—(3); Domestic Economy—(2); General Zoology—(2); Physics: Mechanics of Solids, Liquids, and Gases—(2).

#### SECOND TERM.

Economic Botany—(2); *General Chemistry*—(2), or *Analytical Geometry*—(5); Entomology and Vertebrate Zoology—(5); Physics: Light and Sound—(3).

### JUNIOR YEAR.

#### FIRST TERM.

Vegetable Physiology—(4) eleven weeks; Cryptogamic Botany—(4) seven weeks; Physics: Heat—(3); English Literature—(5); *Quantitative Chemistry*—(2), or *Differential and Integral Calculus*—(5).

#### SECOND TERM.

Domestic Economy—(1); Domestic Chemistry—(1); French—(5); Comparative Anatomy—(4); *Landscape Gardening*—(3) or *Physics: Electricity, Magnetism, and Meteorology*—(2); Political Economy—(3); Dissertations.

### SENIOR YEAR.

#### FIRST TERM.

French—(3); Geology and Mineralogy—(5); Psychology—(5); Dissertations.

#### SECOND TERM.

French—(5); Philosophy of Science and Sociology—(5); Science of Language—(5); Preparation of Thesis.

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\* Optional with History and Domestic Economy to those desiring to take Analytical Geometry and Calculus, or the special course in Mathematics and Physics.

## PRELIMINARY COURSE.

(FOR SUB-FRESHMEN.)

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### INSTRUCTORS.

MR. T. L. SMITH.  
MR. C. F. MOUNT.

MISS SINCLAIR.  
MRS. WELCH.

## COURSE OF STUDY.

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### FIRST TERM.

Higher Arithmetic—(5) six weeks; Algebra, begun—(5) ten weeks; English Analysis—(5); Physiology and Hygiene—(2); Drawing—(2).

### SECOND TERM.

Algebra—(5) eight weeks; Geometry, begun—(5) eight weeks; History—(5); Physiology and Hygiene—(3); \*Descriptive Zoology—(2); Drawing—(2).

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## THE COURSE FOR JUNIORS AND SENIORS IN SPECIAL INDUSTRIAL SCIENCES.

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For the purpose of enabling students of the Junior and Senior classes in the Agricultural College, to attain a high degree of proficiency in a branch of industrial science or art, the Faculty permit a choice of some single study and the omission of others, as given below. It is understood that the student will devote double the usual time to the study so chosen.

No permission will be given to specialize in literary studies; neither will a student who chooses special studies be permitted to take any optional ones of the regular course.

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\* To be taken by those who have passed Physiology and Hygiene.

The special student in Chemistry may omit,

Junior Year—*First Term* —Botany or Physics.

*Second Term*—Comparative Anatomy, or Physics, or Landscape Engineering.

Senior Year—*First Term* —Geology or Veterinary Science.

*Second Term*—Veterinary Science or Science of Language.

The special student in Botany may omit,

Junior Year—*First Term* —Chemistry, or Physics.

*Second Term*—Chemistry or Physics, or Comparative Anatomy.

Senior Year—*First Term* —Geology or Veterinary Science.

*Second Term*—Veterinary Science or Science of Language.

The special student in Zoology may omit,

Junior Year—*First Term* —Chemistry or Physics.

*Second Term*—Chemistry, or Physics, and French.

Senior Year—*First Term* —Geology, or Veterinary Science and French.

*Second Term*—Veterinary Science and French.

The special student in Physics may omit,

Senior Year—*First Term* —Geology, or Veterinary Science, or Agricultural Chemistry.

*Second Term*—Veterinary Science or Science of Language.

The special student in Agriculture may omit,

Junior Year—*First Term* —Physics or English Literature.

*Second Term*—Physics.

Senior Year—*First Term* —Geology.

*Second Term*—Science of Language.

The special student in Horticulture may omit,

Junior Year—*First Term* —Physics or English Literature.

*Second Term*—Physics.

Senior Year—*First Term* —Geology.

*Second Term*—Science of Language.

The special student in Geology may omit,

Senior Year—*First Term* —Veterinary Science.

*Second Term*—Veterinary Science.

The special student in Mathematics and Physics may omit,

Soph. Year —*Second Term*—Botany or Zoology.

Junior Year—*First Term* —Chemistry or Botany.

*Second Term*—Comparative Anatomy, or Chemistry and Landscape Engineering.

Senior Year—*First Term* —Geology, or Veterinary Science, or Agricultural Chemistry.

*Second Term*—Veterinary Science, or Science of Language.

The student in Architecture\* may omit,

Junior Year—*First Term* —Principles of Mechanism.

*Second Term*—Mechanical Drawing.

Senior Year—*First Term* —Principles of Mechanism, Theory of Motors,  
Mechanical Drawing.

*Second Term*—Prime Movers, Mechanical Designing.

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## THE POST-GRADUATE COURSES OF STUDY.

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At a meeting of the Board of Trustees, held in December, 1876, authority was given the Faculty to establish post-graduate courses of study and to confer upon those who should pass said courses a second degree. The Faculty have therefore arranged a carefully considered programme of post-graduate studies. All students desiring to secure a second degree must pursue a course of scientific study embracing two or more subjects selected from this programme and approved by the Faculty. At least one year will be required to complete the course. (*See Conditions for Conferring Second Degrees.*)

The following Professors will instruct and examine candidates for second degrees in post-graduate courses, as follows:

PRESIDENT WELCH,	1—Psychology.
	2—The Philosophy of Science.
	3—Social Science.
PROFESSOR WYNN,	4—The English Literature of the Elizabethan Period.
	5—Science of Language.
PROFESSOR BESSEY,	6—Physiological Botany.
	7—Systematic Botany.
PROFESSOR BEAL,	8—Special Zoology.
	9—Original Designs of Engineering Structures.
PROFESSOR STALKER,	10—Veterinary Pathology and Materia Medica.
	11—Principles of Breeding.
PROFESSOR THOMPSON,	12—Applied Mechanics.
PROFESSOR POPE,	13—Agricultural and Organic Chemistry.

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\* See School of Mechanical Engineering and Architecture.

PROFESSOR MACOMBER, 14—Advanced Physics.

PROFESSOR STANTON, 15—Analytical Geometry and Calculus.

PROFESSOR BUDD, 16—Horticulture and Forestry.

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## MIXED OPTIONAL COURSES AND THE COLLEGIATE CERTIFICATE.

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Students who have passed all the studies of the College courses up to the end of the second term of the Sophomore year, may thereafter choose, in each term, such studies of that term found in any of the College courses as they may desire to pursue; provided that previous to their classification they file with the President a written declaration of their intention not to seek for a diploma of the College; and in no case shall such be classified in less than the equivalent of two full studies.

Any person of the requisite age and preparation who may desire to pursue any particular line of study included in the College curriculum will, upon application to the President, be allowed the advantages of the College classes and all other facilities afforded by the institution.

Students having successfully pursued a course of study in the institution composed of studies in advance of the first term of the Sophomore year, but not such a course as to entitle them to graduation will, upon application to the Faculty, be granted a certificate of standings in such studies.

### DISSERTATIONS IN THE JUNIOR AND SENIOR YEARS.

Students in the Junior and Senior classes shall, during the first term of the Senior and the last term of the Junior year, write two dissertations each, on some topic approved by Special Faculty and embraced in the studies they are pursuing, and which shall be approved by the Professor having charge of such study.

Such Professor shall have supervision of the entire dissertation so written, being the sole judge of its fitness for delivery, and shall report its completion to the President.

Four such dissertations, with the final thesis, will be requisite to graduation.

## DEGREES.

The degree of B. S., Bachelor of Science, is conferred upon graduates in the course in Sciences related to Agriculture.

The degree of B. C. E., Bachelor of Civil Engineering, is conferred upon graduates in the course in Civil Engineering.

The degree of B. M. E., Bachelor of Mechanical Engineering, is conferred upon graduates in the course in Mechanical Engineering.

The degree of B. S., Bachelor of Science, is conferred upon graduates in the Ladies' Course.

## THE GRADUATING THESIS.

Every candidate for graduation shall present an acceptable thesis upon some subject approved by the Special Faculty in whose department he proposes to graduate.

The topic must be selected before the close of the first term of the Senior year, and the completed thesis must be presented to the Special Faculty one month before Commencement day.

Every thesis must be neatly written upon unruled paper, of a size designated by the Faculty; after an acceptance and formal reading, it shall become the property of the College, and shall be deposited in the library.

Ten theses shall be designated for public reading on Commencement day, each Special Faculty selecting its quota, the basis of such selection being [*a*] the value of the thesis, [*b*] scholarship in the course of study pursued, and [*c*] student's good conduct during his stay in College; the remaining theses shall be read before an open session of the Trustees and Faculty of the College.

Each thesis will be in the special charge of the Professor giving instruction in the branch of learning upon which it treats, and such Professor will be responsible to the Faculty for its supervision and correction.

## CONDITIONS ON WHICH HIGHER DEGREES ARE CONFERRED.

These degrees are conferred upon candidates recommended by the Faculty, in conformity with the following rule:

1. The degree of Master of Science is open to Bachelors of Science who are graduates of either the course in Sciences related to Agriculture, or the Ladies' Course of this College.

2. The degree of Civil Engineer, is open to Bachelors of Civil En-

gineering, and Bachelors of Science, previous to 1878, who are graduates of the Civil Engineering course of this College.

3. The degree of Mechanical Engineer, is open to Bachelors of Mechanical Engineering, and Bachelors of Science previous to 1878, who are graduates of the Mechanical Engineering course of this College.

4. The degree of Master of Philosophy is open to graduates of either of the courses of study of this College.

5. The Faculty will recommend for the degree of Master of Science, candidates otherwise qualified, who, after taking their Bachelor's Degree, shall reside at the College for at least one year and pursue, during that time, a course of scientific study embracing at least two subjects selected with the approval of the faculty from the programme of post-graduate studies; and shall pass a thorough examination upon that course, showing in one of the subjects special attainments, and shall present a satisfactory thesis.

6. The Faculty will recommend for the degree of Civil Engineer, candidates otherwise qualified, who, after taking their Bachelor's degree, shall reside at the College for at least one year, and pursue during that time a course of study in Civil Engineering, and at least one additional subject, selected with the approval of the Faculty, from the subjoined programme of post-graduate studies; and shall pass a thorough examination upon that course, showing in one of the subjects special attainments, and shall also present a satisfactory thesis.

7. The Faculty will recommend for the degree of Mechanical Engineer, candidates otherwise qualified, who, after taking their Bachelor's degree, shall reside at the College for at least one year, and pursue during that time a course of study in Mechanical Engineering, and at least one additional subject, selected with the approval of the Faculty, from the subjoined programme of post-graduate studies; and shall pass a thorough examination upon that course, showing in one of the subjects special attainments, and shall also present a satisfactory thesis.

8. The Faculty will recommend for the degree of Master of Philosophy, candidates otherwise qualified, who, after taking their Bachelor's degree, shall reside at the College for at least one year, and pursue during that time a course of study embracing at least two studies selected with the approval of the Faculty, of which Science of Language, Psychology, Social Science, or higher Mathematics shall constitute the principal subject; and shall pass a thorough examina-



tion upon that course, showing in the principal subject chosen special attainments, and shall also present a satisfactory thesis.

9. These degrees may be respectively conferred upon Bachelors of Science, Bachelors of Civil Engineering, Bachelors of Mechanical Engineering graduates of this College who have not resided here since graduation who at a date not earlier than three years after graduation shall pass a thorough examination and present a thesis, as in case of residence.

10. Every resident graduate must apply in writing for examination at least six weeks previous to the annual meeting of the Board of Trustees, stating explicitly the studies in which he desires to be examined, and, at the time of examination (which may be four weeks previous to the meeting of the Board), he must present to the Faculty his final thesis.

11. Every non-resident candidate must notify the Faculty of his candidature in writing, at least six months previous to the annual meeting of the Board of Trustees, stating explicitly his present qualifications, and the course of study which he intends to offer; he must, also, six weeks previous to the annual meeting of the Board, apply in writing for examination, stating explicitly the studies in which he desires to be examined, and at the time of examination (which may be four weeks previous to the meeting of the Board), he must present to the Faculty his final thesis.

12. The fee for these degrees is five dollars.

## **SCHOOLS.**

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Subjoined is an explicit description of the special schools into which for greater convenience the College is divided. Any student who desires it is permitted to pursue exclusively the studies of any single school.

### **SCHOOL OF AGRICULTURE.**

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**PROF. KNAPP.**

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#### **PURPOSE.**

The purpose of this course is to furnish instruction in the details of farm-work, in practical processes, in farm management, and such knowledge of the underlying sciences as will enable the student to become an intelligent agriculturist.

#### **COURSE OF STUDY.**

The course extends over two years, and includes the practical instruction in Agriculture and Horticulture, with some of the more closely related sciences from the general college course, and in addition a special course of lectures designed for this class.

#### **FIRST YEAR.**

##### **FIRST TERM.**

Practical Agriculture (4); Book-keeping (3); Horticulture (1); Veterinary Science (5).

##### **SECOND TERM.**

Horticulture (2); Botany (2); Animal Physiology (2); Stock-Breeding (1); Veterinary Science (5).

#### **SECOND YEAR.**

##### **FIRST TERM.**

Chemistry (3); Zoology (2); Systematic Botany (2); Veterinary Science (5).

## SECOND TERM.

Economic Botany (2); Chemistry (2); Entomology and Zoology (5); Horticulture (2).

In addition to the class-room work, students will assist in conducting farm experiments, and engage in all the out-door operations of an instructive character.

A certificate of attendance will be given on the completion of the course.

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SCHOOL OF HORTICULTURE.

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PROF. BUDD.

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This school forms a part of the regular collegiate course. Singly and alone the time allotted to this technical line of study and practice could accomplish little more than to make the student familiar with some of the leading modes and methods of empirical gardening, considered mainly as a mere art. Supported, however, by the full course in the natural sciences, the routine of Horticultural operations rises above the level of unreasoning custom to the rank of *applied science*. The cultivated plant becomes a thing of life, varied in vitality, habit of growth, and fruitfulness by conditions of soil and air more or less under control.

## FRESHMAN YEAR.

The course begins with the second term of the Freshman year. Barry's "Fruit Garden" is used as a text-book, in connection with seasonable lectures, object lessons, and practice. In connection the lectures by Prof. Bessey on Elementary Botany and Vegetable Physiology prove important aids.

## SOPHOMORE YEAR.

During the second term of this year the course of study includes the propagation and field management of shrubs, evergreens, flower-

ing plants, forestry trees, garden plants, etc. In the study of Forestry, Bryant's "Forest Trees" will be used as a text-book. The course during this year will be supported by instruction in Botany, Chemistry, Physics, Entomology, and Vegetable Biology.

#### JUNIOR YEAR.

During the first term lectures will be given on all the leading topics of Theoretical Horticulture. As supported by the course in Vegetable Physiology and Cryptogamic Botany, the student will be enabled to comprehend vitally important principles pertaining to vital force, germination, root and stem growth, leaf formation and function, climatic adaptation, etc.: intimately associated in our climate with perfect failure or varied degrees of success in all Horticultural operations.

#### THE MEANS FOR PRACTICAL ILLUSTRATION.

1. The Extensive Vegetable Gardens.
2. The Extended and Varied Flower Borders.
3. The Ornamental Grounds.
4. The Extended and Varied Experimental Nurseries.
5. The Extensive Experimental Orchards.
6. The Small-fruit Plantations.
7. The Forestry Plantations.
8. The Propagating Rooms.
9. The Propagating Pits Under Glass.
10. The Collection of Native and Cultivated Woods.
11. The Collections of Injurious and Beneficial Insects.
12. The Sets of Abnormal and Diseased Growths.
13. A Set of fac-simile Fruit Casts.
14. The Horticultural Museum now accumulating.

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#### SCHOOL OF VETERINARY SCIENCE.

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It is the purpose of this school to train students for practice in the veterinary specialty of medicine. The vast proportions of the stock interest in the West, the enormous losses that are being sustained from sporadic and contagious forms of disease among domestic animals, and the low standard of veterinary knowledge existing throughout the

country, rendered the establishment of such a school an imperative necessity. There is a wide and increasing demand for thoroughly trained veterinary practitioners, and no field for the exercise of skill and ability has been left so entirely unoccupied or offers stronger inducements.

The want of proper facilities for study in this department of medical science has necessarily kept the profession far below the position it occupies in European countries. But the extent to which some of our important material interests are threatened by epizootic diseases, has awakened public sentiment to the importance of providing for that sort of instruction that shall be of value in the prevention and treatment of such diseases. A course of study has been adopted that is in no way inferior to those of the best English or American Colleges. The departments of instruction are well provided for and the facilities are good. These will be especially referred to under the several departments.

The school has some

#### WANTS.

the most important of which is a building, that should cost not less than \$4,000 or \$5,000, to be used as a hospital, and provided with pharmacy office, operating room, and the proper appliances for instruction and experimentation.

#### FACULTY.

A. S. WELCH, LL. D., PRESIDENT,

And Lecturer on Hereditary and Inherited Diseases.

M. STALKER, B. S., V. S.,

Dean of the Faculty and Professor of Anatomy. Veterinary Medicine and Surgery.

D. S. FAIRCHILD, M. D.,

Professor of Histology, Pathology and Therapeutics.

C. E. BESSEY, M. S., Ph. D.,

Professor of Botany and Materia Medica.

F. E. L. BEAL, B. S.,

Professor of Zoology and Comparative Anatomy.

T. E. POPE, M. A.,

Professor of Chemistry and Toxicology.

## COURSE OF STUDY.

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### JUNIOR YEAR.

#### FIRST TERM.

Botany—(2); Chemistry—(3); Zoology—(2); Anatomy of Domestic Animals—(5); Dissection; Clinics.

#### SECOND TERM.

Botany—(2); Materia Medica—(2); Comparative Anatomy—(4); Chemistry—(2); Anatomy of Domestic Animals—(5); Dissection; Clinics.

### SENIOR YEAR.

#### FIRST TERM.

Veterinary Medicine and Surgery—(5); Organic Chemistry and Toxicology—(2); Materia Medica—(4); Histology and Physiology—(3); Therapeutics—(2); Dissection; Clinics.

#### SECOND TERM.

Veterinary Medicine and Surgery—(5); Comparative Pathology—(3); Therapeutics—(2); Heredity and Inherited Diseases; Dissection; Clinics.

### ANATOMY OF DOMESTIC ANIMALS.

In this course the anatomy of the horse will be the special object of study, but important structural differences of other domestic animals will be carefully noted. The lectures on anatomy will be illustrated by means of plates, models, skeletons, and prepared specimens of all the organs. A convenient and well-furnished dissecting-room affords the student every facility for this important part of anatomical work. All dissections will be personally superintended by the Professor in charge, or by the demonstrator; and each student will be required to make a prescribed number of dissections before he can be eligible for final examination. The course will include one lecture each day during the Junior year.

### ZOOLOGY AND COMPARATIVE ANATOMY.

The study of Zoology is carried through the first year with five recitations per week. The first term is devoted to the principles of classification and the study of the true relations of the different branches of the animal kingdom, with a discussion of some of the most important

physiological functions of animals. The second term is devoted to the more special consideration of the different species, paying particular attention to those having an economic interest. The work in the classroom is supplemented by practice in the laboratory where the specimens are studied and identified. In addition to this, each student is required to make a collection in some branch of Zoology which he may select.

The study of Comparative Anatomy is taken up in the second term of the second year and occupies four lectures per week throughout the term. The subjects treated are General Biology and Anatomy, the anatomy of the various organisms, the evolution of the different systems of organs, and comparative embryology. In addition to the lectures, each student spends one afternoon per week in the laboratory in the dissection and study of typical organisms.

#### HISTOLOGY.

This course embraces, 1st,—*Systemic Histology*. This section deals with the minute anatomy of the animal tissues, and this is taught systematically by lectures throughout the first term of the Senior year. 2d—*Functional Physiology*. This section refers to animal functions, and these are studied under the headings of (a) Nutrition, (b) Nervous, and (c) Reproduction. This section is taught in connection with the preceding and illustrated by diagrams, microscopical preparations, etc. 3d—*Practical Histology*. This includes the practical study of the various tissues of the animal body by the aid of the microscope. The various methods of preparing tissues for microscopic examination are taught with the object of familiarizing the eye of the student with the minute anatomy of all the tissues of the animal body. This study is prosecuted by the student under the immediate supervision of the Professor. The entire course in Histology includes about eighty lectures, and six hours laboratory work per week. The facilities in this department are excellent. The laboratory is a large, well-lighted room supplied with a large number of histological microscopes of the most approved stands, furnished with first-class objectives. There are also large stands with high powers for the more difficult work and for comparison.

### GENERAL COMPARATIVE PATHOLOGY, PATHOLOGICAL ANATOMY, AND HISTOLOGY

embraces: 1st. The study of the Pathology, Prevention, etc., of the epizootic and general diseases of cattle, horses, sheep, pigs, dogs, and other domestic animals; the natural history and peculiarities of parasites with the affections to which they give rise, and the means to be adopted in preventing and destroying them. 2d. Pathological Anatomy and Histology. This course is full and complete. Pathological specimens of all kinds are brought before the class, and Pathological Histology is fully taught. Post-mortem examinations are frequently made in the presence of the class for the purpose of familiarizing the student with the appearance of diseased tissues. The relations of Pathological Histology to the principles of medicine and surgery are carefully treated of, and the advances made in the application of the microscope to exact pathology fully considered. The use of the microscope in the study of pathological specimens forms an important part of the laboratory work during the last term of the Senior year. The course in Pathology includes about eighty lectures.

### HEREDITY.

A course of twenty lectures will be given during the first half of the fall term of the Senior year. The subjects treated will comprise transmissible qualities and characteristics; inherited traits and habits; the hereditary diseases, defects, mutilations, and descendible diseases, specially of horses and cattle; reversion; prepotence; in-breeding; crossing, and the production of races. The nature and treatment of lineal diseases will receive thorough attention.

### INSTRUCTION IN BOTANY

extends through one year, the student devoting two exercises per week to this study during that time. In the spring term of his first year the student acquaints himself with general Botany, giving his attention to the identification of plants, and for this purpose he joins the class in Systematic Botany in the regular College course.

In the fall term the student takes up Economic Botany and Materia Medica, and the origin, preparation, and properties of the principal medicines derived from the vegetable kingdom are discussed and dwelt upon, and by means of carefully selected specimens, the student is made thoroughly familiar with their appearance.



During the year each student makes and preserves a collection of dried specimens of plants, and in this work he is required to devote particular attention to the native and cultivated plants which are of importance to the Veterinarian.

### CHEMISTRY.

Junior Year, First Term—General Chemistry.

Junior Year, Second Term—Qualitative Analysis.

Senior Year, First Term—Quantitative Analysis; Physiological Chemistry.

Senior Year, Second Term—Quantitative Analysis; Physiological Chemistry.

General Chemistry embraces manipulating chemical apparatus, handling and making gases, studying the properties of different chemical elements and their compounds. In Qualitative Analysis, the students receive chemicals, minerals, etc., and determine the elements of which they are composed. The course is very thorough and no student can go on into the Senior year who is unable to analyze correctly inorganic substances. Writing chemical reactions and solving problems form an important part of the class work. There are three recitations a week during the first term, two in the second, and laboratory work two afternoons a week during each term.

In the Senior year students commence by analyzing quantitatively, pure chemicals, and, as soon as they have acquired sufficient skill, take up physiological work. This includes the detection of poisons; analyses of urine from healthy and diseased animals; examinations of food, including water; qualitative and quantitative analyses of the secretions in, and excrements from the body; together with such work as the clinical department may require. Students will also compound or make the medicines required by the school. During the second term original work is required, recitations twice a week during the year, laboratory work three afternoons during the first term and two in the second. A separate laboratory is devoted to this work. The desks are furnished with water, gas, and filter pumps. The required apparatus is furnished by the department and is very complete, embracing scales capable of weighing 1-20,000 of a gram, microscopes, combustion furnace, and miscellaneous apparatus to the amount of \$3,500 in value.

### THERAPEUTICS.

The physiological and therapeutical value of medicines used in Veterinary practice, their properties, uses and doses, are carefully considered throughout the Senior year, and include about fifty lectures.

### VETERINARY MEDICINE AND SURGERY.

This course embraces theoretical and practical instruction in the treatment of diseases to which all domestic animals are subject, as well as the theory and practice of surgery. The lectures will be illustrated from a valuable collection of specimens illustrative of the morbid anatomy as developed by a wide range of diseases. The students will have the benefit of assisting in a large practice, and those of the Senior class will be made familiar with the use of instruments and the administration of medicines. Several hundreds of animals, including horses, cattle, swine, and sheep, are kept on the College Farm, a large portion of which is breeding stock. Frequent inspection of these flocks and herds will afford the student most valuable opportunities for observing sanitary conditions, and gaining experience in obstetrical practice. The course will include one lecture each day during the Senior year, or about one hundred and eighty lectures. A collateral course of reading, embracing some of the best approved English works on the subjects taught, will be required.

### CLINICS.

One half day each week will be devoted to the clinics held at the College hospital. The advanced students will be required to examine animals for certificates of soundness, diagnose diseases, and prescribe for the same. Hundreds of animals are presented at these examinations, for which medical or surgical advice is required; the student must exercise judgment as to the course of treatment to be pursued in these widely differing forms of disease.

### CONDITIONS OF ADMISSION.

Candidates for admission must be at least sixteen years of age. Before entering the classes they must pass an examination in Reading, Orthography, Geography, English Grammar, and Arithmetic.

## LENGTH OF COURSE.

The course occupies two years. Sessions begin the first of March and continue till the latter part of November, with a vacation of two weeks in July.

## EXAMINATIONS.

At the close of each term, examinations will be given on the subjects taught during the term. These examinations will be final, with the exception of the following subjects: viz., anatomy, materia medica, therapeutics, and veterinary medicine and surgery. On the last named branches the student must pass a final examination at the end of his course. The method of examination will be largely under the control of the Professor in charge, but in every case will be such as to give ample proof as to the efficiency of the candidate.

## CONDITIONS OF GRADUATION.

Candidates for graduation must be eighteen years of age; must have completed the entire course of study, and attained a standing of seventy-five per cent in all the studies pursued. Every candidate for graduation shall present an acceptable thesis upon some subject approved by the Faculty. A graduation fee of five dollars will be required.

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SCHOOL OF DOMESTIC ECONOMY.

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MRS. WELCH.

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## FRESHMAN YEAR.

## SECOND TERM.

Elementary Botany and Animal Physiology.

## SOPHOMORE YEAR.

## FIRST TERM.

General Chemistry, Botany, Laundry Work, Plain Sewing, and Dress Making.

## SECOND TERM.

General Chemistry and Botany.

## JUNIOR YEAR.

## FIRST TERM.

Botany and Vegetable Physiology

## SECOND TERM.

Domestic Economy by lectures, Domestic Chemistry, Landscape Gardening, and Practice in Cookery.

The following is the course in Cookery. The lessons, twelve in number, are selected mainly from Miss Juliet Corson's Cooking-School Text-Book:

*Lesson One.*

Yeast, Biscuit, Milk Rolls, Breakfast Twist, Gold Cake, and Silver Cake.

*Lesson Two.*

Bread, Baked Macaroni, and Swiss Pudding with cream sauce.

*Lesson Three.*

Boiled Eggs, Poached Eggs, Fried Eggs, Omelette, Parsley Omelette, Sweet Omelette, and Apple Tarts.

*Lesson Four.*

Chicken Curry, Ragout of Beef, Broiled Steak, and Cassel Pudding with hard dressing.

*Lesson Five.*

Chicken Pie, Duchesse Potatoes, Julienne Potatoes, Kentucky Potatoes, and Fruit Cake.

*Lesson Six.*

Broiled Mutton Chops, Mutton Chops Sautee, Vegetables—general directions, Baked Turnips, Hot Slaw, and Pound Cake.

*Lesson Seven.*

Blanquette of Veal, Pork and Beans, and Sponge Cake.

*Lesson Eight.*

Roast Beef, Apple Pie, Cream Meringue Pie, Baked Apples, Apples and Rice, and Apple Custards.

*Lesson Nine.*

Stock, Caramel, Cream Cakes, and Chocolate.

*Lesson Ten.*

Clear Soup, Pea Soup, and Lemon Pie.

*Lesson Eleven.*

Mulligatawny Soup, Roast Turkey, "Angel's Food," and Tea.

*Lesson Twelve.*

Fried Oysters, Oyster Soup, Escaloped Oysters, and Coffee.

The first instruction in this department was given in 1872, by a course of lectures to the Junior ladies on matters connected with housekeeping. In 1877 the Trustees added a course in Cookery, and provided and furnished a kitchen for the use of the class. For the last two years, therefore, lessons in plain cooking have been given to the Junior ladies, together with lectures on such topics as "House Furnishing," "Care of the Sick," "Management of Help," "Care of Children," "Dress," etc., etc. Domestic Chemistry also forms a part of the course in Domestic Economy.

Our facilities were still further increased last spring by the addition of a laundry, wherein the ladies of the Sophomore class learn to wash and iron. During March and April two afternoons a week are spent in this laundry, under the careful supervision of competent teachers. During May and June lessons are given twice a week in plain sewing, the use of sewing-machines, and dress-making. From the first of August to the last of October the class is instructed in Cookery. Each student is required to do the work explained in every lesson, so that when the course is finished she will have cooked every article described.

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## SCHOOL OF MILITARY SCIENCE.

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GENERAL GEDDES.

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### FIRST YEAR.

*First Term* —School of the Soldier.

*Second Term*—School of the Company.

## SECOND YEAR.

*First Term* —School of the Battalion.

*Second Term*—Field Artillery Drill.

## THIRD YEAR.

*First Term* —Broad-Sword Exercise and Artillery Drill.

*Second Term*—Small-Sword Exercise.

## FOURTH YEAR.

*First Term* —Cavalry Drill and Small-Sword Exercise.

Lectures on Military subjects will be delivered throughout the course.

All male students of the College, except such as may be excused by proper authority, are required to wear the prescribed uniform, attend all military exercises in their respective classes, and become members of the College Battalion. The College uniform is made of good serviceable cloth and is furnished at cost, the price not exceeding fourteen dollars.

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SCHOOL OF LITERATURE AND LANGUAGE.

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PROF. WYNN AND MISS SINCLAIR.

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The literary course opens with Rhetoric as a full study in the first term of the Freshman year. It is made optional with Latin and German; the Rhetoric being finished up with the first term; Latin and German continuing throughout the Freshman year. The design is, with the aid of the most competent text-book we can find, to require as much original work in grammatical purity, principles, choice, and use of words, kinds of composition, etc., as the time of the classes will permit. No pains are spared to illustrate the main excellencies of style in the works of the great masters who have written in the mother tongue, and in this way to make this study a fitting preparation for English Literature which is to follow.

A course in History has been planned for the Ladies' course in the Sophomore first term. The aim here will be, instead of running over Universal History in a dry text-book fashion, to take hold of some fruitful epoch in the ages, and develop it, the student furnishing the result of his own researches along a line of references indicated in the lecture-room.

The first term of the Junior Year is occupied with English Literature proper. It is a full study and open to all courses except the Mechanical and Civil Engineering. As there is but one term devoted to this, and it is impossible in so brief a space to become familiar with the whole history of the English mind, from the days of the Anglo-Saxon Conquest down to the present time, a similar method will be pursued here as in Universal History—some specially productive era being selected, and the student required, under the guide of an outline furnished in the lecture-room, to sum up investigations of his own in the literary, social, and religious influences prevailing at that time and giving character to the great master-pieces which were then produced. At this stage of the student's progress, the library becomes his laboratory, and care will be taken that the necessary books of reference will be furnished to his hand.

The literary course closes with the Science of Language in the second term of the Senior year. Here the student, keeping in the main close to some competent text-book, seeks to discover the underlying laws of language, making that subtle instrument, which is to be his means of conveying his intellectual life and power to his fellows, the object of his study, with the view to determining the origin, history, growth, decay, and ethnic relations of all the languages on the face of the earth, and settling, in so far as that may be done, the relation of language to thought. As leading out to psychology in one direction, to ethnology in another, and to comparative mythology in another, it is replete with interest, and has a fascination that entitles it to a crowning place in the course.

#### LATIN.

One year's course in Latin is provided—a full study during the first and second terms of the Freshman year. The design is simply to meet the practical necessities of the scientific curriculum that prevails here. A brief preparatory drill introduces the student to Cæsar; after reading carefully two books, he enters Virgil's *Æneid* and continues in it to the end of the year. The Roman pronunciation is adopted.

Allen & Greenough's text-books are used, and the most advanced methods of imparting instruction are diligently sought for and practiced.

#### FRENCH AND GERMAN.

In the present course each of these languages is regarded as a means to an end, and not as an end in itself. Each is therefore pursued as an art rather than a science, and consequently the natural or empirical method of instruction has a more prominent place than the scientific. By combining the two methods in this manner, better practical results are obtained than would be possible in the same time by following either method exclusively. In the study of either French or German the students are expected, from the beginning, to use the language in the class-room as far as possible.

The study of German has been introduced as optional with Latin and Rhetoric in the Freshman year. It is not claimed that anything but a rudimental knowledge of the language can be acquired in the allotted time, but special effort is made to render this knowledge practical and to make it the basis for future attainment. An energetic and persevering student gains by one year's thorough application, a knowledge of German which, though limited, may still be of great practical use. Otto's Conversation Grammar is used as a text-book during the first term.

The course in French occupies the last three terms of the courses in Mechanical and Civil Engineering and the Ladies' Course. The chief object in view is not an exhaustive and critical knowledge of the grammar of the language, but as high a degree of its practical mastery as is attainable in the time. Much time is therefore given to reading, in order to familiarize the student with different styles of writing and to give facility in translating. In both French and German the much neglected art of understanding the spoken language receives particular attention. For acquiring the necessary knowledge of inflections and for reference, Keetel's Collegiate French Course is used.



## SCHOOL OF MATHEMATICS AND PHYSICS.

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PROFS. STANTON AND MACOMBER.

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The course of instruction in Pure Mathematics pre-supposes a thorough knowledge of Arithmetic and the elementary principles of Algebra. It occupies three years for its completion, and embraces:

**FRESHMAN YEAR.**—First term—Algebra, Loomis' Treatise; second term—Plane, Solid, and Spherical Geometry, Loomis.

**SOPHOMORE YEAR.**—First term—Trigonometry, Chauvenet; second term—Analytical Geometry, Church.

**JUNIOR YEAR.**—First term—Differential and Integral Calculus, Buckingham; second term—Calculus and Philosophy of Mathematics.

During the Freshman year the studies of this department are common to all the College courses. Trigonometry is required of ladies desiring to pursue higher mathematics; it is a regular study in the other courses. Analytical Geometry and Calculus are regular studies in both the Engineering courses, optional with Chemistry in the Ladies' course, and may be taken by such students in the Course in Sciences related to Agriculture as obtain an average standing of 3.75 in the studies of the first term of the Sophomore year. Advanced Calculus and the Philosophy of Mathematics are studied by students in the special course in Mathematics and Physics.

*Algebra.*—In algebra there will be two divisions. The first of these will be composed of students who show by their entrance examinations thoroughness in Arithmetic and a ready familiarity with the principles of Algebra through Equations of the First Degree; the other will include all students obtaining a high standing in Arithmetic and passing the required examination in Algebra, but show in this latter study a want of thoroughness. Particular attention will be given in this study to the explanation of the cardinal principles, and the drill in the solution of problems and equations will be conducted with reference to fixing these principles in the minds of the students. The first division will complete the subject in fourteen weeks; the other will devote to its study the entire term.

*Geometry.*—All students securing a standing of three (four being perfect) in either of the divisions in Algebra will be permitted to enter the class in Geometry. This class will be divided into two divisions, corresponding with those in Algebra. The first division will give to the study of Plane, Solid, and Spherical Geometry the last four weeks of the first, and all of the second term of the Freshman year, while the other division will devote to the same subject the eighteen weeks of the second term. In this class the student is early taught the full meaning of a Geometrical demonstration. He is warned against the danger of learning the proposition by rote; and in order that he may not fall into this error, is, at the end of the first book, assigned original theorems, which he is required to demonstrate. He is expected not only to thoroughly understand each proposition, but to be able to so arrange and present the points of the proof as to perform a complete and perfect demonstration.

*Trigonometry.*—Instruction is given in this branch during the first nine weeks of the first term of the Sophomore year, by Professor Beal. The class is thoroughly drilled in the nature and use of the Trigonometrical functions.

*Analytical Geometry.*—This study is pursued by the Sophomore class during the second term. The course of instruction embraces Determinate and Indeterminate Geometry, including a full examination of the Conic Sections. The underlying principles are brought prominently forward and discussed. The students are required to carefully analyze each article, and solve the problems connected therewith. To secure thoroughness frequent reviews are given.

*Calculus.*—Instruction in Calculus is given during the spring term of the Junior year. To enter this class it is necessary that the student should have *passed* the lower mathematical studies of the course. In no case can the study be pursued successfully without previous drill in Analytical Geometry. Buckingham's Calculus is used as a text-book. The abstruse principles of this method of mathematical investigation are explained upon the theory of *rates*, rather than upon the theory of *infinitesimals*. Instruction is given by daily recitations and lectures, with a review each Friday, of the week's work. Twelve weeks are devoted to Integral, and the remainder of the term to Differential Calculus.

*Advanced Calculus and the Philosophy of Mathematics.*—Students in the Special Course in Mathematics and Physics will continue the study of Calculus during a greater portion of the Junior year. A

large number of problems illustrating the different forms into which differentials must be thrown in order to obtain the integrals, will be solved. The object aimed at will be to make the student so familiar with the principles of the science and the methods of procedure as to enable him to apply the complicated machinery of Calculus to practical use. In the latter part of the term lectures will be given on the Philosophy of Mathematics.

#### PHYSICS.

Students commence this study in the Sophomore year and complete it at the close of the Junior year. The study is conducted by means of lectures, and recitations from the text-book, illustrated throughout by numerous experiments. During the first term of the Sophomore year a course of lectures on mechanics, the mechanical powers, and the laws of motion, is given. Also, the general subject of the Mechanics of solids, liquids, and gases, is studied from the text-book. Sound and Light are studied during the second term. Especial attention is given to Geometrical Optics and the theory of optical instruments. The first term of the Junior year is taken up in the study of Heat and Magnetism. Electricity and Meteorology complete the course during the last term. Especial attention is given to the later discoveries in Electricity and Magnetism. Dynamo-electric machines, the electric light, and all the more recent discoveries and applications of electricity are fully considered. The course is completed by a number of lectures on the recent advances in physical science, in which such topics as, The Conservation of Energy, The Correlation of the Physical Forces, The Theory of Machines, Relation of Vital to Physical Forces, and The Dissipation of Energy, are discussed.

Liberal appropriations were early made for a Cabinet of physical apparatus, and as additions are made to it every year the department is tolerably well supplied with facilities for illustrating the more prominent subjects in Physics. Among other prominent pieces of apparatus might be mentioned a large imported Holtz electrical machine, with Geissler tubes and other apparatus necessary for illustrating the laws of frictional electricity; a fine scientific stereopticon for the Drummond light, and a large number of pictures for lecture work; one of Ritchie's best air pumps, with the necessary apparatus for experiments on Pneumatics; Melloni's apparatus for radiant heat; and other instruments for studying mechanics, optics, and sound, too numerous to attempt a mention of them. The original cost of the Cabinet amounts

to about four thousand five hundred dollars. Ganot's Physics is used as a text-book.

The Physical Laboratory is supplied with gas and water in abundance, and is heated by steam. The lecture room has its seats arranged so that a class of one hundred and fifty can see the experiments to the best advantage. An advanced course which occupies the Senior year, is offered to students who desire it. Such as choose this course are required to spend from two to three afternoons per week in the Laboratory. They will be occupied in advanced work in Optics, Electricity, and Magnetism, and will receive lectures on the elements of physical manipulations and methods of research.

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## SCHOOL OF CHEMISTRY.

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PROF. POPE.

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**SOPHOMORE YEAR.**—First term, General Chemistry; second term, Qualitative Analysis.

**JUNIOR YEAR.**—First term, Quantitative Analysis; second term, Quantitative Analysis, Organic Chemistry, the Ladies' Course in Domestic Chemistry, Lectures on Human Foods, etc.

**SENIOR YEAR.**—First term, Agricultural Chemistry; second term, Lectures on Foods for Domestic Animals.

General Chemistry embraces manipulating chemical apparatus, handling and making gases, studying the properties of different chemical elements and their compounds. In Qualitative Analysis the students receive chemicals, minerals, etc., and determine the elements of which they are composed. The course is very thorough, and no student can go on into the Junior year who is unable to analyze correctly inorganic substances. Writing chemical reactions and solving problems form an important part of the class work. Three recitations a week are held in the first term and two in the second—laboratory work two afternoons a week during the year.

In the Junior year students commence by analyzing, qualitatively, pure chemicals, and as soon as they have acquired sufficient skill analyze paints, alloys, minerals, cast iron, water, etc. The second term's work in the laboratory is a continuation of the first, and includes also organic analyses embracing such substances as hay, milk, uric acid, sugar, etc. The class work in the first term consists principally in working out methods of analyses suitable for compounds whose composition is given. During the second term organic chemistry is studied. Three afternoons a week are required for laboratory work during the first term and two during the second, but the laboratory is open all day and as each student has a separate desk he can spend as much extra time in the laboratory as his studies permit. The ladies' course during the first term is nearly the same, in the second they have one lecture a week on domestic chemistry.

. In the Senior year, first term, lectures are given on agricultural chemistry, embracing such topics as chemistry of soils and plants, manures, forces, etc; second term, on foods for domestic animals.

In the special course in chemistry, students are permitted to drop one of the specified studies and devote twice the usual time to chemistry.

The laboratories cover a space of forty-five hundred square feet, have one hundred desks furnished with water and gas; those in the quantitative laboratory have filter pumps on each. The apparatus of this department is valued at thirty-five hundred dollars, and includes scales capable of weighing to one-twentieth of a milligramme, combustion furnace, microscope, spectroscope, etc.

The text-books used in the Sophomore year are Cooke's Chemical Philosophy, Snively's Tables for Systematic Qualitative Analysis; Junior year, Fresenius' Quantitative Analysis, Bloxam's Chemistry, Organic and Inorganic (the organic portion alone is studied); Senior year, lectures.

## SCHOOL OF BIOLOGY.

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PROFS. BESSEY AND BEAL.

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### BOTANY.

All students in the second term of the Freshman year begin the study of Elementary Botany. By means of lectures twice a week, with illustrations from fresh specimens, the student easily masters all the more important facts relating to the general or gross anatomy of plants.

During the first term of the Sophomore year the students in all the departments pursue the study of Systematic Botany. They are expected to analyze and classify a sufficient number of plants so as to familiarize themselves with the more important orders and the principles of classification. Each student is required to prepare not less than fifty herbarium specimens, which are submitted for examination at the end of the term.

The higher course in Botany begins with Economic Botany in the second term of the Sophomore year. The origin history and relationship of cultivated plants, together with a discussion of the value and relative importance of the timber trees of the world are taken up in a course of twenty-five lectures. Also the weeds of the farm and garden, with suggestions as to their eradication are discussed at some length, and the rudiments of Medical Botany are introduced as occasion demands.

In the first part of the Junior year, students who take the higher course in Botany pursue the study of Vegetable Anatomy and Physiology, reciting four hours a week from the text-book, and spending in addition one afternoon each week in the laboratory. About half the term is given to this study, and, if the student is faithful and earnest in his work, he cannot fail to obtain a fair knowledge of the structure and mode of growth and nutrition of plants, as understood by modern Vegetable Physiologists.

The remaining portion of the term is devoted to lectures upon Cryptogamic Botany, in which the student is familiarized with the structure

and principles of classification of the lower orders of plants. The lectures are supplemented by a course of laboratory work, which includes an examination of typical and other important forms. The parasitic Fungi are studied and dwelt upon to a considerable extent, in accordance with the growing idea of their importance in Agriculture, Horticulture, and the industrial arts.

The means of investigation throughout the course are: (1) the College Herbarium; (2) a collection of billets of various kinds of woods; (3) a collection of grasses; (4) a collection of cones of evergreens; (5) a set of diagrams and charts; (6) eleven compound microscopes (with Hartnack's, Tolles', and Beck's objectives); (7) alcoholic and dry material for examination in the Botanical Laboratory; (8) students also have access to the collections of mosses, lichens, and fungi belonging to the professor.

#### ZOOLOGY.

This course is begun in the second term of the Freshman year by the study of Descriptive Zoology in which are discussed the external form, outward relation, and geographical distribution of the various members of the animal kingdom. In the first term of the Sophomore year the general subject of Comparative Zoology is taken up, including the principles of classification and the true relations of the different parts of the animal creation, with a consideration of their more important physiological functions. The second term of this year is devoted to a special consideration of the different animals, more particularly those which possess an economic interest. Following this plan, the greater portion of the term is occupied with the subject of Entomology; special attention being paid to those insects which have proved injurious to the farmer and gardener. Their life-history, as far as known, is examined and the various remedies and checks that have been found efficacious are suggested. In addition to the classroom work of this year, each student is required to collect, prepare, and identify a certain number of specimens from some department of the animal kingdom. These specimens are then deposited in the museum. During the last term of the year, the student spends one afternoon (or three hours) of each week in the study and identification of specimens in the laboratory.

In the second term of the Junior year the study of Comparative Anatomy is taken up in a course of lectures extending through the whole term. The general and special facts of Biology and the ana-



tomical structure of the various organisms, are discussed with as much minuteness of detail as the time will admit, followed by a *resume* of the subject in which the evolution of the different systems of organs is traced from their earliest beginnings to their most differentiated forms. The whole is supplemented by a short course upon Embryology in which the development of the ovum is traced and compared with those forms already discussed. During this term the student spends one afternoon in each week in the laboratory in the dissection and study of typical forms of the animal phylla.

The library to which the students have access every day has a fair supply of books bearing upon these topics, among which are the following: "Harris' Insects"; Carpenter's "Comparative Physiology"; Owen's "Comparative Anatomy"; Gegenbaur's "Comparative Anatomy"; Huxley's "Anatomy of the Invertebrata," Darwin's "Origin of Species," "Descent of Man," and "Variation of Plants and Animals Under Domestication." Jordan's "Manual of the Vertebrates of North America" is used for identifying specimens.

Ample facilities will be afforded to students who may wish to pursue any special line of zoological or anatomical research.

The Museum occupies a large room on the third floor of the south wing of the main building. It includes mounted specimens of a few mammals; several hundred birds (mounted), representing the avian fauna of the state; a large collection of reptiles, in alcohol; a few fishes; and a small but typical collection of invertebrates. A set of the "Ward Models," illustrating the principal larger fossils, and a cabinet of mineralogical specimens, are of service in the study of Geology. There are, besides, the following collections in the process of formation: A seed collection; an entomological cabinet; sets of the eggs and nests of birds; the brains of vertebrates; skulls of mammals; and skeletons of vertebrates.

During the second term of the College year, the museum room is used as a laboratory, in which the students in Zoology make a direct study of the specimens. Tables and chairs enough to accommodate twenty students at once, are provided, and the room is open three afternoons a week for work.

Visitors are admitted to the museum every afternoon from one to five o'clock.



## SCHOOL OF PHILOSOPHY.

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PRESIDENT WELCH, PROFS. WYNN AND STANTON.

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**FRESHMAN YEAR.**—Second term, Moral Science.

**JUNIOR YEAR.**—Second Term, Political Economy.

**SENIOR YEAR.**—First term, Psychology; second term, Philosophy of Science, Sociology, and Science of Language.

### MORAL SCIENCE.

The Freshman class engages in the study of Moral Science, reciting three days a week during the fall term. Peabody's Moral Science is used, and the subject is illustrated by abundant concrete examples.

### POLITICAL ECONOMY.

In this division of Social Science are taught, by text-book, familiar lectures and discussion, the laws of labor—its products and their cost; the principles of capital, money, foreign trade, tariff, taxation, and all the influences that quicken or retard exchange. The student thus gains a thorough acquaintance with the scientific data that underly and regulate industry. He becomes intelligent, moreover, in all questions of public policy respecting which there is such a wide diversity of opinion.

### PSYCHOLOGY.

In the study of Psychology we aim to avoid all those questions which the discussion of centuries has failed to solve, and which consequently have no bearing either on human conduct or a knowledge of human nature. The object sought by the student in this study is to gain a systematic acquaintance with the phenomena of thought, feeling, and volition; to get an insight, clear as may be, into the workings of his own mind, its modes of action, its limits, its means and order of growth from sense to reasoning. No real progress in Psychology can be made except through the revelations of consciousness. The student must attain the difficult art of rightly scrutinizing his own mental states and modes of thought. Six essays on topics chosen by the Pro-

fessor are written during the term by each member of the class. The facts of Psychology we may add are made the basis for the subsequent study of the Philosophy of Science and, together with the principles of Biology, are properly preparatory to Sociology. The library is well supplied with books of reference.

#### PHILOSOPHY OF SCIENCE.

This subject which occupies the Senior class the first half of the fall term is presented by lectures on the creation and classification of the sciences; methods of investigation, observation, experiment, and hypothesis; inductive and deductive reasoning; necessary and contingent truths; regressive reasoning illustrated by Geometry; limits of scientific knowledge, etc.

#### SOCIOLOGY.

The remaining portion of the Senior year is given to a rapid survey of the fundamental principles of Sociology. This survey will comprise the data of the science, namely, the feelings, ideas, and wants of man, the primitive condition of the human race—its superstitions, erroneous beliefs, and the impulses by which savage tribes struggled up into civilized nations. A brief account will also be given of the origin and growth of government, law, science, religion, industry, and art. The object sought is simply to lay the foundation for future acquisitions.

[For Science of Language see School of Literature and Language.]

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### SCHOOL OF MECHANICAL ENGINEERING AND ARCHITECTURE.

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PROFS. THOMSON AND SMITH.

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The College aims by the studies pursued in the School of Mechanical Engineering to lay a foundation of sound theory sufficiently comprehensive to enable its graduates to enter understandingly on the further investigations of the problems which may arise in the several depart-

ments of their professional work. It further aims to teach the student such skill and dexterity in the use of tools and machinery as to enable him not only to properly design, but also if necessary to construct, any machinery which the development of the mechanic arts may require; shop-practice is therefore included in the course. The workshop is fitted up with vises, tools, and machinery for the purpose of enabling the teacher to give instruction according to the most approved methods of modern practice. This work is carried through the Freshman and Junior years, and may be pursued in the Senior year in connection with designing and drawing. The leading studies are as follows:

*Geometrical and Projection Drawing.*—This is carried on with, and is subservient to, the work done in the shops.

*Descriptive Geometry.*—This subject is taught by the Professor of Civil Engineering, for which see Civil Engineering.

*Principles of Mechanism.*—Treats of mechanism in general; rolling contact; sliding contact; wrapping connectors; trains of elementary combinations; general principles of aggregate velocity; combinations for producing aggregate paths or motion in space; adjustments; properties of friction; butting friction; twisting friction; friction wheels; coil friction; universal joints.

*Analytical Mechanics.*—This subject is taught by the use of text-book and lectures, and embraces all the subjects which are deemed appropriate and profitable to the student in the Civil and Mechanical Engineering courses.

*Resistance of Materials.*—This embraces experimental work, and results found by other experimenters, from which are deduced the laws and coefficients of elasticity; work of elongation, and time of oscillation; set, viscosity, modulus of strength; safe limits of loading; tension and compression; strength of columns; shocks; crystallization and practical formulas.

*Prime Movers.*—The indicator as applied to the steam engine; the use of brakes and dynamometers; to proportion fly-wheels so that their velocity shall deviate from a mean velocity by a given amount; measurement of a source of water power; water power engines; water pressure engines; impulse of water on vanes; turbine water wheels; combustion of fuel, efficiency of furnace; principles of thermo-dynamics; air engines; steam engines; furnaces and boilers. The student is also required to take indicator diagrams, and from them calculate the power

of engines with steam working at different degrees of expansion, the diagrams being taken from different engines.

*Machine Drawing.*—Complete working and detailed drawings for use in the shops; drawings of original designs; finished in water colors and by line shading; designs and estimates for machinery.

### ARCHITECTURE.

Architecture is now a branch of the School of Mechanical Engineering and is intended to be supplementary to the instruction given in architects' offices. It aims to supply a thorough knowledge of the history of the art, of building processes and materials, of scientific construction, and of composition and design. The technical studies begin with the first term of the Junior year, and are comprised under the following heads:

*Elements of Architecture.*—The five orders and their applications; arches; vaults; roofs; domes; spires; doors and windows; stairs.

*History of Architecture.*—The General history of Greece and of Greek art; Roman history and art; mediæval and modern history and art.

*Scientific Construction.*—Foundations, brick-work, stone-work; theory of the arch; strength of pillars and walls.

*Specifications and Working Drawings.*—Masonry; carpentry; plumbing; iron-work and ventilation; details and dimensions; estimates.

*Theory of Architecture.*—Ornamentation, etc.

*Drawing and Design.*—Free-hand drawing; tinting; solution of architectural problems; original design.

*Books of Reference.*—Fergusson's History of Architecture, Tredgold's Carpentry, Jones' Grammar of Ornament, Viollet le Duc's Discourses on Architecture, Gwilt's Encyclopedia of Architecture.

In connection with this course of study the same amount of shop-practice will be required as in the Mechanical Engineering course, and will include the use of tools and wood-working machinery, the construction of problems in stair-building and joinery, and such other work as may arise in the repairing and construction of buildings on the grounds.

## SCHOOL OF CIVIL ENGINEERING.

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PROF. BEAL.

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The basis of this course of study is laid by a systematic drill in Algebra and Geometry during the Freshman year. In the Sophomore year, first term, Plane Trigonometry and Land Surveying are taught in the class room, and the latter is supplemented by work in the field where the student becomes acquainted with all the manual portions of the business, and acquires proficiency in the use of the chain, compass, transit, and other instruments. Notes are kept of the data taken as in actual work and from these the areas are calculated and the fields platted. In the second term Descriptive Geometry, Spherical Trigonometry, and Analytical Geometry are begun and the latter finished, having five recitations per week during the whole term. In the former, two recitations or lectures are given, in addition to which the student prepares twenty plates of drawings, each consisting of some special graphical problem which involves one or more of the general problems of Descriptive Geometry. By this means Mechanical Drawing is practiced at the same time that its underlying science is studied. Spherical Trigonometry occupies one exercise per week throughout the whole term.

In the Junior year the course becomes more strictly technical. During the first term the various methods of laying out railway curves, putting in switches and side-tracks, and setting slope-stakes, are taught, together with the principles of the construction of water works, sewers, retaining walls, and other combined structures. As nearly as possible all the problems investigated in the class-room are taken into the field and staked out upon the ground. Data are also taken for problems in earth work, both excavation and embankment, and the cubic contents calculated. In pure mathematics, Calculus is taught during the term, there being five recitations per week. Descriptive Geometry is continued in much the same manner as before, only dealing with the higher problems of Stereotomy, Shades, Shadows and Perspective, and Isometric. About twenty plates of drawings are prepared.

In the second term Analytical Mechanics and the Strength of Materials occupy five recitations per week. During this term, also, a practice survey of a portion of a line of railway is undertaken and the engineering of the work carried as far as is possible without the actual construction. The line is run, the curves put in, the profile taken, the grades determined upon, and it is then cross-sectioned and left ready for the contractor. The notes of the work are kept exactly as in actual practice, and from them a profile and plan are drawn, including, also, the more important topographical features of the adjoining lands.

A course in Astronomy is included in the department in this term. It is partly descriptive and partly mathematical, extending as far in the latter as the determination of latitudes and longitudes and the laying out of a true north and south line by observing the meridian transit of a star.

During the Senior year the student devotes himself to the higher problems of Engineering, such as the strength and stability of arches and suspension bridges, the construction of bridge and roof trusses and girders, and the laying of foundations. A portion of this year also is given to the designing of structures and calculations of their strength, with detailed drawings of the same: in a word, the office work of a constructing engineer.

The department is well-furnished with field instruments, consisting of two transits, two levels, one compass, chains, tapes, rods, poles, etc. The text-books used are Gillespie's Land Surveying, Henck's Field Book for Engineers, Wood on Roof and Bridge Trusses, Stoney on Strains, Allen on Dock Walls; while many others of a similar character are kept in the library for reference.

## CALENDAR FOR 1880.

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**Monday, March 1. Term opens.**

**Tuesday, March 2. } Entrance Examinations.**  
**Wednesday, March 3. }**

**Thursday, March 4. Recitations begin.**

**June 25, } Term Examinations.**  
**to July 2 }**

**Friday, 7:30 P. M., } Junior Exhibition.**  
**July 2. }**

**Saturday, July 3. Summer Recess begins.**

**Tuesday, July 20. Second Term begins.**

**Tuesday, July 20. } Entrance Examinations.**  
**Wednesday, July 21. }**

**Wednesday, July 21. Recitations begin.**

**Nov. 3, } Term Examinations.**  
**to Nov. 10. }**

**Monday, 7:30 P. M., } Address before the Literary Societies.**  
**November 8. }**

**Tuesday evening, } Address before the Trustees.**  
**November 9. }**

**Wednesday, } Commencement Exercises.**  
**November 10. }**

### **Winter Vacation**

**From November 11, 1880, to March 1, 1881.**

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REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
STATE AGRICULTURAL COLLEGE,  
LOCATED AT  
AMES.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.



## REPORT.

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TO THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

YOUR Committee appointed to visit and inspect the State Agricultural College and Farm, located at Ames, in the county of Story, and to ascertain:

*First.* "Whether the appropriations made by the last General Assembly have been wisely and economically expended."

*Second.* "Whether they have been expended for the object appropriated."

*Third.* "Whether Chapter 67, of the Acts of the Seventeenth General Assembly has been complied with in not contracting indebtedness in excess of appropriations."

*Fourth.* "Whether there has been any diversion of any money from the specific purpose for which it was drawn out of the State Treasury," have performed the work assigned them and respectfully report the following:

We began by an examination of the "Sewer" contemplated by the appropriation made by the Seventeenth General Assembly, and which sewer leads eastward from the college building a distance of about one hundred and ten rods. This sewer is constructed of tile ten inches in the diameter, in the clear, manufactured at the city of Des Moines, and is believed to be sufficient for all the purposes for which it was intended. It cost the sum of \$1,472.25, as shown by the books and vouchers in the hands of E. W. Stanton, Secretary, and which books and vouchers were by us carefully examined and found to correspond with the statement of expenditures found on page eighteen of the Eighth Biennial Report of the Board of Trustees.

We next examined the new Laboratory constructed in the summer of 1878, for the Horticultural department. This is a plain wood building, 26x45 feet, with walled cellar for the storage of grafts

and vegetables—with “lecture-room,” “seed-room” and “work-room” on the first floor, and with Horticultural museum and store-room overhead. Attached to this Laboratory is a “Green-house” and office, 22x44. Here are found an almost endless variety of plants and flowers, which have either been propagated on the premises, or collected by J. L. Budd, the efficient and accomplished professor in charge, and the proceeds of which when sold will be used to replenish the stock, and to purchase such new and valuable varieties as time and science shall disclose. In the immediate vicinity of the Laboratory, a cistern has been constructed, and equipped for use. The propagating hall is heated by a furnace and hot water pipes, which extend in their windings a distance of about two hundred feet.

The Laboratory is a model of neatness, much too small to accomplish all that is desired, but it is in good and reliable hands, and its prospective career is one of great promise to the State. The actual cost of this building and its attachments, including cistern and greenhouse, was \$2,500.00, that being the exact sum appropriated by the Seventeenth General Assembly for that purpose, and which in the estimation of your committee has been honestly and wisely expended. An inspection of the vouchers in the hands of Secretary Stanton, shows the items and amounts to exactly correspond with the schedule of expenditures and receipts, recited on pages twenty and twenty-one of the said report of the Board of Trustees.

On the farm is an orchard which has been planted for several years, and while some of the trees are doing well, many are hanging out the signals of distress and decay. Two years since another orchard of about one thousand trees was planted out under the supervision of Professor Budd, whose knowledge and experience in the line of his profession is a legacy to the State. A nursery of about forty thousand thrifty trees—one and two years old—of the Russian varieties, was also planted out by Professor Budd. The great value of this nursery consists chiefly in its winter varieties—of sweet and sour apples—something long desired, and as long denied to those who have chosen Iowa for their homes. These trees are the off-shoots from the fruit bearing orchards of Central and Northern Russia, and are believed to be as hardy and enduring as the oak. Leaving the orchards and the nursery, we examined the stock, and found the number and variety related in said report on pages seventy-five and seventy-six. All the stock is in good condition, and amongst the cattle were some fine speci-

mens—such as may now be found in many other stock yards of the State. There were a few remaining hogs, which were cholera proof—and a small flock of sheep.

We found so much of the farm as broken well cultivated, but neither the stock nor the crops yet produced on the farm have been of sufficient importance as to materially affect the European market. The farming implements were well housed and in fair condition.

As near as your committee could ascertain, there are about 873 acres of land known as the College Farm. Of these acres about one hundred and fifty are under the plow. About two hundred acres are subject to overflow in times of storm and flood. Three hundred and fifty are timber, brush lands, and pasture. The balance ornamental grounds and building sites, and suitable for little else.

The college building is an imposing structure, when viewed in the distance, but a careful inspection will disclose the imperfect foundation on which it rests.

The rooms of the college building, and their equipments, are generally in good order, and show the skillful management of those in charge.

In and around the buildings erected on the farm, are evidences of care and economy, but many repairs and enlargements are yet necessary to make them inviting and complete.

But whatever the number or character of the buildings, or the numbers and accomplishments of those who have them in charge, the *farm itself* was selected in an unfortunate locality for a model farm on the garden soil of Iowa.

Your committee are of the opinion that nearly all, if not the entire improvements, for which appropriations are asked by the Board of Trustees in their "Eighth Biennial Report," are absolutely necessary for the success of the various enterprises contemplated by the Government in granting, and the State in receiving, the immense public domain, upon the proceeds of which their present and future welfare greatly depend. But if some things asked for are more needed than others, as we believe they are, we would recommend that the buildings, erections, and improvements contemplated in the third, fourth, and sixth propositions embraced in said report be first considered.

Visiting this farm and College in time of vacation, your committee have no way of knowing more about their results and the scientific training and acquirements of its students than can be gathered from

reports, verbal and written, and from individual observation. Those whose educational career has begun and ended within its walls, are now scattered all over the State, and the people are the jurors before whom the students are on trial.

It should be remembered that the College and its auxiliary force has been in operation only about eleven years—a time hardly long enough with the limited appropriations made, to realize the great advantages which are expected to result to the State.

. Changes of officers and plans, heretofore too often made, may have been disastrous to the best interests of the Agricultural department. From the first day of March, 1880, Professor S. A. Knapp will take charge of the farm and stock, and his good reputation, long since established, is the evidence of the beginning of a new and better life.

The trustees, president, professors, and managers of the College and Farm, appear to be enthusiastic and accomplished in the line of their professions, and should they fail to reach that degree of perfection desired, it will be because they are surrounded by difficulties and embarrassments which energy and science cannot overcome.

Secretary Stanton is deserving great credit for the rapid and accurate manner in which he is able to disclose the business affairs pertaining to his office, and Superintendent J. C. Hiatt should be remembered as a faithful and efficient manager of the stock and farm.

For answer to other instructions, we respectfully submit the schedule annexed, marked exhibit "A," and made a part of our report.

W. P. GAYLORD,  
*On the part of the Senate.*

PLINY NICHOLS,  
JOHN VAN STADEN,  
*On the part of the House.*



## SCHEDULE "A."

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**A. S. WELCH, LL. D., PRESIDENT,**

Professor of Psychology and Philosophy of Science.  
Salary, \$3,100. Allowed \$150 for preaching on Sabbath.

**GEN. J. L. GEDDES, M. PH., PRESIDENT *pro tem.*,**

Professor of Military Tactics and Engineering, Steward, and Deputy Treasurer.

Salary, \$1,900, divided as follows: Salary as Professor of Military Tactics, \$900; salary as Steward, \$600; salary as Deputy Treasurer, \$400; allowed, as Steward, board during the session of school.

**W. H. WYNN, A. M., Ph. D.,**

Professor of English Literature.  
Salary, \$1,600.

**C. E. BESSEY, M. S., Ph. D.,**

Professor of Botany.  
Salary, 1,600.

**A. THOMPSON, C. E.,**

Professor of Mechanical Engineering, and Superintendent of the Workshop.  
Salary, \$1,600; allowed use of house.

**F. E. L. BEAL, B. S.,**

Professor of Civil Engineering.  
Salary, \$1,600.

**T. E. POPE, A. M.,**

Professor of Chemistry.  
Salary, \$1,600.

**M. STALKER, B. S., V. S.,**

Professor of Veterinary Science.  
Salary, 1,600.

**J. L. BUDD, M. H.**

Professor of Horticulture.  
Salary, 1,600.

**J. K. MACOMBER, B. S.,**

Professor of Physics, and Librarian.  
Salary, \$1,600.

**E. W. STANTON, B. S.,**

Professor of Mathematics and Political Economy.  
Salary, \$1,600. Allowed, as Secretary of Board of Trustees, \$200, and use of house, said house to be kept by him in first class repair.

**S. A. KNAPP, A. M.,**

Professor of Practical and Experimental Agriculture.  
Salary, 1,600; allowed \$150 for preaching on Sabbath; allowed also use of farm house, the furniture therein and the garden connected therewith, free of rent, provided Mrs. S. A. Knapp keep a boarding house, boarding the employes of the College, at the rate of \$3.00 per week, for each boarder, and others at reasonable rates.

**MRS. MARY B. WELCH, PRECEPTRESS,**

Lecturer on Domestic Economy.  
Salary, \$1,100.

**MISS MARTHA SINCLAIR, ASSISTANT PRECEPTRESS,**

Instructor in French and English.  
Salary, \$1,000.

**T. L. SMITH, B. S.**

Foreman in the Work-shop and Lecturer on Architecture.  
Salary, \$700.

**A. B. SHAW, B. S.,**

Foreman and Instructor in the Printing Office.  
Thirty cents per hour for time actually employed, amounting to about \$500.

**C. F. MOUNT, C. E.,**

Assistant in Civil Engineering.  
Salary, \$600.

**HERBERT OSBORNE, B. S.,**

Assistant in Zoology and Entomology.  
Salary, \$300.

**WINIFRED M. DUDLEY, B. S.,**

Teacher of Instrumental Music.  
Allowed the tuition charged students, amounting to about \$300 a year.

**G. S. FOX,**

Teacher of Vocal Music.  
Allowed the tuition charged students, and \$100 by the College for instructing the military band and taking charge of Chapel Music.

**MRS. A. THOMSON,**

Housekeeper and Assistant in Experimental Kitchen.  
Salary, \$600; allowed board during the session of school.

**H. D. HARLOW,**

Proctor.  
Salary, \$62 per month.

**W. M. GREELEY,**

Treasurer.  
Salary, \$500.

**JAMES GILMORE,**

Foreman upon the Farm.  
Salary, \$30 per month and board.

**BRUCE ROBINSON,**

In charge of the Stock.  
Salary, \$30 per month and board.

**JERRY SEXTON,**

Foreman in Horticultural Department.  
Salary, \$60 per month.

The following explanatory notes are deemed necessary to a correct understanding of the answer to question fifth embraced in our instructions:

1st. No salaries are paid by the State. The salaries of the Steward and House-keeper are paid from the receipts of the boarding department; all others from the college interest fund.

2d. The two music teachers receive no pay from the college fund (except the \$100 to Prof. Fox, mentioned above), since music is not a department of the college. Students are permitted to take music, paying the teacher for the instructions received.

3d. The Board of Trustees arranged with Mrs. Knapp to keep a boarding-house in the farm building, for the reason that no other provision could be made for boarding the farm hands.

4th. The President and Prof. Knapp were employed by the Board of Trustees to preach upon the Sabbath, because there is no regular chaplain, and to secure one would cost the college much more than the present arrangement.

5th. Mrs. Welch, Lecturer on Domestic Economy, was authorized by the Board of Trustees to visit New York, Boston, and other places for the purpose of studying the best models and most approved appliances for fitting up the experimental kitchen connected with the Iowa Agricultural College; her bill of expenses was ordered paid from the appropriation to Domestic Economy.



# SEVENTH BIENNIAL REPORT

OF THE

## BOARD OF TRUSTEES

OF THE

# IOWA SOLDIERS' ORPHANS' HOME

AND HOME FOR INDIGENT CHILDREN.

---

NOVEMBER 1, 1879.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:

F. M. MILLS, STATE PRINTER.

1879.



# REPORT.

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*To the Eighteenth General Assembly of the State of Iowa:*

THE Trustees of the Soldiers' Orphans' Home, and home for indigent children, as required by law, submit their seventh biennial report.

For the statistics of this institution the General Assembly is respectfully referred to the accompanying report of the Superintendent, which under appropriate heads conveys exact information concerning Industrial Pursuits, Buildings, Schools, Library, and Land. The sanitary condition of the Home is reported by its skillful physician, Prof. W. F. Peck, and Col. Horton, Treasurer, submits a financial statement.

Last June the Sixth Annual Conference of Charities was held at Chicago, and this board delegated thereto Mr. S. W. Pierce, Superintendent of the Home, as a representative of Iowa's charities. Mr. Pierce's paper, read on that occasion, is appended hereto as a valuable contribution to the literature of our eleemosynary institutions.

The Trustees take the liberty of asking legislative attention to the character and interests of the Home, as a general Orphans' Home and home for indigent children. It will occur to any observer that there should be legislation to compel counties to remove indigent children from the common poor-houses and put them in this Home, where the elevating influences of health, cleanliness, schools, industry, and refinement will prepare them for active life and the duties of good citizenship.

Older States are just now brought face to face with serious public problems grown out of pauper-bred populations. It is proven that from each person reared in a poor-house to adult age spring an average of three descendants to return to shelter in the poor-house or find it by compulsion in the penitentiary.

Let our poor-houses remain as asylums for the aged indigents or

those whom disease or misfortune overtake in life, but let the State insist, and by law enforce its wish, that the poor-houses shall not be nurseries for rearing the young amid influences that in each succeeding generation will augment the number of indigents and criminals in a rapidly increasing ratio.

By the report of the Superintendent it will be seen that, with a part of the counties reported, Iowa probably has in her poor-houses a hundred children of tender years, of school age, at the period in which their characters are being formed for good or bad. For this hundred, hundreds will appear in the next generation to be punished as criminals or supported as paupers.

Our commonwealth is now at the threshold of this question. Shall we meet it wisely? Shall we insist that these children shall be removed from degradation and darkness and brought into the school-room, taught industry, and become fortified with right principles and right habits? Or shall we, in every poor-house, establish a pauper and criminal nursery and breed and rear a population of hundreds with no motive in life except to get and eat the bread of dependence or of crime?

This Board, to remove objections based in cost, has reduced the expense of maintaining children in the Home from \$120 each to \$100 per year, and when it is considered that this is for food, clothing, schooling, nursing, doctoring, shelter, and a real parental oversight inclusive, no argument is required to demonstrate the economy of rearing indigent children under the enlightening influences of the Home.

The State cannot afford to ignore these considerations, nor to snub nor slight the conditions under which this far-reaching charity should be placed to secure its greatest success and efficiency.

The buildings are unfit and unsafe for occupancy, with the exception of the brick cottages and laundry. The old barracks donated by the General Government are decayed and endanger the health of the inmates, while they burden the funds of the Home to keep them warm in winter and wholesome in summer. The Superintendent has indicated the wants of the Home in buildings and lands, and the Board very earnestly urges the appropriation of the amounts and for the purposes named in his report. The offices, sewing-room, library, reception and reading rooms, Superintendent's quarters, dining-hall, and kitchen should be under a common roof, in a general headquarters' building, and the rotting and repulsive wooden cottages should be re-



placed by such substantial, pleasant, comfortable, and cleanly buildings as the brick cottages now upon the grounds. Unless this is done the State will so impair the efficiency of the Home as to render its extinction only a question of time. That the State cannot afford this we are so confident that we again urge an intelligent investigation of the subject, believing that enlightened public selfishness will compel the development of the Home to its broadest capacity for usefulness.

With accommodations upon a proper scale, we would suggest as an outline for further legislation that the Assembly should provide that when a certain number of taxpaying citizens petition the board of supervisors for removal of indigent children from the poor-house to the Home, the board shall without option order such removal.

Such legislation will remove from the boards of supervisors a responsibility they are now averse to assuming and put it where it belongs, upon the tax-payers, and the State's poor children, who have in their undeveloped brains and bodies all the mighty possibilities which are the endowment of humanity, will be thereby put into a genial and friendly atmosphere to be prepared for useful and honorable lives.

JOHN P. IRISH,  
C. C. HORTON,        }  
SETH P. BRYANT,     } *Trustees.*



SUPERINTENDENT'S REPORT.

*To the Honorable Board of Trustees of the Iowa Soldiers' Orphans' Home and Home for Indigent Children:*

GENTLEMEN—I have the honor of presenting to you at this time a report of this institution for the biennial period closing September 30, 1879.

The number of children in attendance October 1, 1877.....	180
The number of children admitted.....	60
Total attendance.....	240
The number of children discharged.....	110
The number of children in attendance September 30, 1879.....	130

There are 68 boys and 62 girls. Of these, 92 are soldiers' orphans, and 38 indigent orphans. Twenty different counties have sent us in all 62 indigent children. Twenty-four of these have been discharged. The 38 remaining are from 15 counties, as follows:

Benton.....	4	Johnson.....	3
Cedar.....	4	Linn.....	2
Cass.....	3	Mahaska.....	3
Clinton.....	6	Polk.....	1
Clayton.....	2	Scott.....	3
Davis..	2	Story.....	1
Delaware.....	2	Total.....	38
Fayette.....	1		
Jackson.....	1		

The soldiers' orphans are from 27 counties, as follows:

Allamakee.....	2	Johnson.....	5
Benton.....	2	Louisa.....	4
Black Hawk.....	5	Madison.....	1
Buchanan.....	2	Marshall.....	1
Cerro Gordo.....	1	Mahaska....	4
Clayton.....	1	Mills.....	4
Davis.....	2	Muscatine.....	8
Dallas.....	1	Polk.....	18
Des Moines.....	1	Pocahontas.....	2
Delaware.....	6	Scott.....	8
Fayette.....	1	Wapello.....	3
Floyd.....	2	Worth.....	1
Guthrie.....	3	Total.....	92
Hardin.....	1		
Jackson.....	3		

The average monthly attendance has been 148. The average age is 11 years. There are two children 3 years old, and six that are 15. The number of applications for admission of children has been greater during the past six months than for a like period during the last five years. There are to-day scores of poor, neglected children in our state, growing up without the care, education, and training that would save them from vice and crime. Many a noble widowed mother, within my knowledge in needy circumstances and feeble health, would never cease to be duly grateful to the State if it would educate and care for her younger children for a few years. If this be not done, many of them will grow up in ignorance and vice. It is a sad fact that not one in ten of the children twelve years old and upwards, sent here, can read in the first reader. Good homes are *readily* found for indigent orphans that have blue eyes, soft hair, sweet dispositions, and sound bodies and minds; but the dull, ill-favored, ill-tempered, indolent ones are not wanted, and are often sent to the poor-house. From the age of two to sixteen, the child's character is formed. The mind is then plastic, and may be easily shaped to good or evil resolves. The surrounding world is a school full of teaching, and they learn from it. If all dependent children were placed under the care of those whose primary object is the promoting their physical, mental, and moral welfare rather than seeking any personal emolument, and to this were added the teaching of thorough habits of industry, their *future* interests would be subserved. If a child is vicious or criminal, it is sent to a reform-school, if deaf and dumb, blind, or idiotic, to the proper institution. If, however, it has all its faculties complete, with eyes and ears wide open, but is so unfortunate as to be *poor*, what is done with it? In too many cases it is let alone, or perhaps helped just enough to keep it just where it is. In more cases it is sent to a poor-house, there to be tainted by associations often with vile men and women, and deprived of even a common-school education.

This is a sin against God and humanity. The prevention of crime is one of the great questions of to-day. If we care for the children properly, the men and women of the future will care for themselves. We need only to note the condition of the older States, as a result of neglecting to properly care for and train up their indigents. The facts in regard to pauperism and resulting crime in the states of Ohio, New York, and Massachusetts are startling. As a State, Iowa must meet this question, sooner or later. There are to-day 67 children in 14 out of 49 of the poor-houses of this state.

The Home in all its departments is in good condition. The schools are thoroughly graded and divided into two departments, of three grades each. They are presided over by two faithful, competent teachers. Promotions from a lower to a higher grade are made at the end of each term according to the result of thorough examinations. Children do not attend school under six years of age. School is in session five and a-half hours a day, for five days in the week, and nine months in the year. One hour each evening is devoted to study in the several cottages. The older boys are not in school from April 1st to October 1st, as they are needed at farming and gardening. Reading, writing, spelling, arithmetic, geography, grammar, U.S. history, and physiology are thoroughly taught. Vocal music is taught a part of each year.

Sabbath-school is held in the chapel each Sabbath morning, and preaching each Sabbath afternoon. All children and adults have access to an excellent library of 1300 volumes of well-selected books, which are highly prized and thoroughly read. The matron keeps up a correspondence with the children after they leave the Home, that we may know where they are and how they are doing, and aid them by counsel and advice. Ninety-nine per cent. of those over twenty years old are good citizens to-day. From what I know of their ancestry and natural inclinations, I feel that fully ten per cent. of them, had they been left to shirk for themselves, without the education and training of this Home, would to-day have been supported as criminals. I feel that each employe is earnestly laboring for the present and future good of the children under their care and instruction.

The grounds inclosed by the buildings have been greatly improved by grading and planting 200 choice shade-trees. The children occupy five different cottages. The girls occupy buildings and playgrounds situated apart from the boys.

The smaller children are in buildings by themselves, the larger by themselves, and the medium-sized by themselves. Each cottage is calculated to contain twenty-five children, and is in charge of a competent Christian lady.

The cooking, washing, and ironing are done in buildings used only for those purposes. The children and employes take their meals in one large common dining-hall. The ladies in charge of cottages wait upon their respective families, and the children in turn attend to the wants of the ladies when at their meals. An abundant supply of well-cooked, wholesome food is provided at regular intervals. Fruit is very freely used throughout the year. Children never go to their meals or to school with ragged clothes or unwashed faces and hands.

Careful attention is paid to cleanly, orderly habits. Thorough bathing and clean linen are attended to at least once each week. All children are furnished with the necessary articles of clothing, as often as is needed, to keep them well clothed, neat, and tidy. Each child's garments are all plainly marked. Each child has a Sunday suit entire.

Sleeping apartments and school-rooms are well ventilated. Care is taken to properly develop the physical, mental, and moral natures. The diet for the inmates is as follows:

For breakfasts—Baked beans, brown bread, white bread, and butter, three times a week. Oat meal and milk, bread, and syrup, twice. Potato soup, bread and syrup, and apples, once. Codfish, bread and butter, and apples, one morning.

For dinners—Vegetable soup, bread and butter, coleslaw or pickles, and apples, once a week. Hash, bread and butter, baked potatoes, pickles, and apples, twice. Noodle soup, baked potatoes, bread and butter, and apples, once. Bean soup, bread and syrup, pickles and apples, twice a week. On Sundays, bread and milk, pie or cake, baked apples, raw apples, and a part of the time cold meat.

For suppers—Bread and milk, with gingerbread, three times a week. Mush and milk, corn bread, white bread, once. Bread and milk, warm rusk, once. Bread and milk, with sugar, cookies, and baked apples, once. For luncheon, Sundays, cake and cheese, and apples.

The above is the regular dietary, but in addition to this, during the

season of green fruits and vegetables, their tables are supplied with sweet potatoes, green corn, tomatoes, string-beans, peas, grapes, melons, and berries.

The limited number and dilapidated condition of the most of our buildings are such that it is very difficult to conduct the institution as we desire. The old buildings have been made as comfortable and respectable as possible; yet their condition is such that the prospect for the coming winter is anything but pleasant to those who must spend another winter in them. The two new brick cottages are very comfortable, and are occupied by the girls. They are greatly overcrowded, as we have 62 girls in them, which is 12 more than the most they were built to accommodate. We are, we fear, forced to put some of our girls into a building not suitable or safe to live in, as we have several urgent applications for admission of girls. Our school-rooms are only moderately comfortable. We have not proper accommodations for our employes, or for visitors. None of our old buildings are suitable for children or employes to live in during another winter, and their condition is such that repairs are useless. It will be remembered that the State has never yet made an appropriation for new buildings for this Home. We have struggled along for the last fourteen years in these buildings, given by the general government to this Institution. They were cheaply built, and have done good service, till they now should be abandoned as soon as possible. The time has come when a liberal appropriation must be made for the erection of new buildings for the use of this institution, if it is to be continued. Our location is an excellent one. The grounds are nicely rolling, beautiful, and attractive, well covered with shade-trees and supplied with a never-failing stream of water. Well water is also never-failing and abundant, and of the best quality. Sewerage and surface drainage are perfect. Street-cars run to our gate. Steam cars stop at a station fifty rods from our gate. We are two and a-half miles from the post-office.

The sanitary condition of the Home is and has been most excellent. There has been almost entire freedom from sickness, except for a few weeks, while we were visited with the measles. There were 47 cases of measles, all of which resulted entirely satisfactorily. There has been no death, with an average attendance of 148. The last death was in December, 1876. During the year 1878 one of the cottage managers, a Mrs. Turner, from Ohio, who had been with us but a week, was taken sick, and after a brief illness died, leaving us all to greatly mourn her loss.

For further particulars in sanitary matters, you are respectfully referred to the report of Dr. W. F. Peck, our physician, who has ever attended promptly to all our wants when in need of a physician.

The various industries of the Home are under the thorough supervision of the superintendent and matron, aided by all the employes. Each child, old enough to be useful, is each day regularly employed at some useful labor, suited to its age and strength, as well as capability. Each child has certain hours, each day, for work, play, and study. Raising small fruits, gardening, and farming employ the older boys the most of the year. Broom-making and carpentering have given employment to a part of our boys. We need other industries established, but for want of sufficient funds we have not been able to at-

tempt them. The girls are taught to do all kinds of general housework, to make and mend girls' and boys' clothes, and to wash and iron, and a few each year are taught to cook. They do a great amount of work, and do it cheerfully and well. They do all the ironing of the children's clothes, all the dining-room work, and a good share of the kitchen work. The following articles of clothing have been cut and made in our sewing department: Coats, 232; pairs pants, 332; pairs drawers, 282; chemise, 246; night-gowns, 150; skirts, 122; sun-bonnets, 104; cloaks, 45; sacques, 24; waists, 53; dresses, 429; aprons, 558; shirts, 575; vests, 6. They have also knit on our machine during the last twelve months 114 pairs socks and 112 pairs hose. The smaller boys do their own housework, and much of their own mending.

We have cultivated three acres of garden vegetables, one and a-half acres of strawberries, one acre of raspberries, one-half acre of grapes, ten of corn, and two of potatoes. This work has been done without employing a farm-hand, the boys having done all but the plowing. The book-keeper has charge of the boys when at their work.

We have rented for cultivation during the past three years ten and a quarter acres of land adjoining us on the south. We greatly need more land for cultivation, as but eight acres of our own land can be cultivated. The importance of systematic labor and training for dependent children in trades or farm labor is equally important with instruction in chapel or school-room. Among the surest safeguards which children can have, when they leave this institution, is the thoroughly formed habit of constant, uniform labor.

In accordance with instructions given by a resolution adopted at your meeting in June last, I attended the sixth annual conference of charities, held in Chicago, June 10, 11, and 12, as a delegate from this institution; and at the request of the president of the conference read a paper setting forth the condition and working of this institution.

*The following shows the expenditure of the balance of the special appropriation, made by the Sixteenth General Assembly of \$3,600 for furniture, improvements, and repairs:—*

RECEIPTS.

Balance—cash on hand October 1, 1877.....\$1,702.44

EXPENDITURES.

For insurance, transfer to general fund.....	\$ 800.00
For carpenters' services.....	312.00
For building fence.....	7.90
For steam fitting.....	48.23
For plastering and whitewashing.....	112.64
For lumber.....	128.00
For hardware and general repairs.....	298.67
Total expenditures.....	\$1,702.44

*The following shows the expenditure of the special appropriation made by the Seventeenth General Assembly of \$3,000:—*

RECEIPTS.

Cash from C. C. Horton, Treasurer.....	\$3,000.00
Cash from sale of sundries.....	4.05
Total receipts.....	\$3,004.05

EXPENDITURES.

For furnishing cottages.....	\$ 500.00
For carpenters' services.....	510.12
For lumber.....	300.67
For hardware and general repairs.....	864.50
Total expenditures.....	\$2,175.29
Balance—cash on hand September 30, 1879.....	\$ 828.76

*The following shows the receipts and expenditures of the special appropriation for industrial pursuits:—*

RECEIPTS.

Cash on hand October 1, 1877.....	\$ 33.50
Cash from R. P. Spear, Treasurer.....	450.00
Tools sold.....	7.30
Total receipts.....	\$ 490.80

EXPENDITURES.

For rent of land.....	\$ 127.85
For labor.....	89.16
For strawberry and raspberry plants.....	69.95
For seeds, etc.....	40.62
Tools and implements.....	163.22
Total expenditures.....	\$ 490.80



The following shows the receipts and expenditures of the library fund :—

RECEIPTS.	
Cash on hand October 1, 1877.....	\$ 10.76
Cash from C. C. Horton, Treasurer.....	200.00
Total receipts.....	\$ 210.76
EXPENDITURES.	
For library books.....	\$ 41.66
For periodicals.....	97.47
Total expenditures.....	\$ 139.13
Balance—cash on hand September 30, 1879.....	\$ 71.63

The live stock consists of 4 horses, 15 cows, 2 calves, 32 hogs and shoats, 12 pigs, and 100 fowls.  
During the biennial period the live stock furnished, and we consumed, the following:

3,760 pounds beef killed, valued at.....	\$ 274.90
1,458 pounds veal killed, valued at.....	103.56
10,755 pounds pork killed, valued at.....	607.15
135 pounds poultry killed, valued at.....	13.50
68,640 pounds milk consumed, valued at.....	2,256.40
718 dozen eggs consumed, valued at.....	77.64
Total value.....	\$8,333.15

We commenced in May, 1879, with six stands of bees, from which we have taken 220 pounds of honey, valued at \$26.40. We now have 15 stands of bees, all in good condition.  
The following is what has been grown on the land we have cultivated:

FOR 1878.		FOR 1879.	
Pounds grapes.....	600	Quarts raspberries.....	312
Bushels string beans.....	10	Quarts strawberries.....	256
Bushels shelled beans.....	15	Pounds grapes.....	800
Bushels peas.....	3	Bushels string beans.....	3
Bushels potatoes.....	20	Bushels shelled beans.....	2
Bushels beets.....	100	Bushels peas.....	4
Bushels carrots.....	80	Bushels potatoes.....	300
Bushels parsnips.....	60	Bushels beets.....	160
Heads cabbages.....	1000	Bushels onions.....	55
Pounds pie-plant.....	200	Bushels tomatoes.....	126
Bushels tomatoes.....	100	Bushels turnips.....	10
Bushels turnips.....	10	Pounds pie-plant.....	400
Pounds asparagus.....	200	Pounds asparagus.....	250
Pounds hops.....	5	Pounds hops.....	20
Loads pumpkins.....	20	Pounds sage.....	80
Pounds lettuce.....	10	Dozens cucumbers.....	80
Dozens cucumbers.....	300	Heads cabbages.....	2000
Bushels field corn.....	460	Loads pumpkins.....	2
Bushels onions.....	100	Bushels carrots.....	10
Dozens sweet corn.....	300	Bushels parsnips.....	25
Pounds sage.....	8	Pounds lettuce.....	10
		Bushels field corn.....	560
		Dozens sweet corn.....	600

The following is an itemized statement of incidental expense account:

For postage.....	\$ 238.92
For horse car, and railroad, and hotel .....	44.40
For freight and express.....	16.02
For bees and apiary supplies.....	80.00
For berry boxes.....	13.56
For seeds and tools.....	27.78
For fire-works.....	76.25
For fire-extinguisher and pump.....	51.70
For various sundries.....	110.94
For printing.....	15.50
For harness repairs.....	10.70
For buggy and wagon repairs.....	72.25
For horse-shoeing.....	63.75
For games and Christmas gifts.....	94.08
For insurance.....	102.50
For rent of land... ..	116.95
For laundry and machinery.....	1,939.27
Total.....	\$3,074.57

The figures below show the quantities used of the following articles during the biennial period:

Pounds meat.....	15444	Gallons oil.....	545
Pounds pork and lard.....	11448	Dozens eggs.....	800
Pounds meal.....	10400	Pairs girls' shoes.....	153
Pounds butter.....	4097	Pairs boys' shoes.....	209
Barrels flour.....	518	Dozens girls' hats... ..	11
Barrels sugar.....	18	Dozens boys' hats and caps.....	20
Barrels apples.....	348	Bushels potatoes.....	955
Barrels beans.....	19	Bushels coal.....	17031
Gallons syrup.....	1856	Yards flannel cloths.....	2009
Gallons vinegar.....	704	Yards cotton cloths.....	5258
Gallons milk.....	68640	Yards coat and pants goods....	1089

NUMBER OF OFFICERS AND EMPLOYES, AND THEIR SALARIES.

	SALARY PER MO.
1 Superintendent.....	\$100.00
1 Matron.....	50.00
1 Physician.....	33.33
2 Teachers, each.....	25.00
5 Cottage managers, each.....	20.00
1 Housekeeper.....	12.00
1 Laundry manager.....	15.00
1 Laundress.....	12.00
1 Book-keeper and assistant.....	20.00
1 Baker.....	26.00
1 Carpenter and engineer.....	26.00
1 Laborer and teamster.....	15.00
1 Night watchman.....	15.00
1 Superintendent sewing-room.....	15.00
1 Seamstress.....	10.00
1 Superintendent kitchen and dining-hall.....	20.00
1 Assistant superintendent kitchen and dining-hall.....	10.00

## STATEMENT,

*Showing the Total Receipts and Expenditures from October 1, 1877, to September 30, 1879 :*

## RECEIPTS.

Cash on hand October 1, 1877.....	\$ 2,481.83	
Cash from R. P. Spear, Treasurer, industrial fund.....	450.00	
Cash from R. P. Spear, Treasurer, general fund.....	14,075.00	
Cash from C. C. Horton, general fund.....	21,935.93	
Cash from C. C. Horton, improvem't and furniture fund	3,000.00	
Cash from C. C. Horton, library fund.....	200.00	
Cash from all other sources.....	1,224.85	
	<hr/>	
Total receipts.....		\$43,367.61

## EXPENDITURES.

For groceries and provisions.....	\$ 9,467.06	
For salaries and labor.....	12,980.79	
For clothing.....	4,979.63	
For improvements and repairs.....	2,577.73	
For furniture.....	1,813.80	
For incidental expenses.....	3,084.57	
For books and stationery.....	459.49	
For drugs and medicines.....	219.56	
For live stock.....	1,104.91	
For fuel.....	1,876.84	
For lights.....	170.19	
For library.....	139.13	
For industrial pursuits.....	490.80	
	<hr/>	
Total expenditures.....		\$39,364.50

Balance cash on hand Oct. 1, 1879	{	General fund.....	\$ 3,102.72	
		Improvement fund.	828.76	
		Library fund.....	71.63	
				\$ 4,003.11

## A TABULAR

*Of Monthly Receipts and Expenditures on account of the Iowa Soldiers'*

Total receipts.....	\$40,865.78
Cash on hand Oct. 1, 1877 .....	2,481.83
Total. ....	\$43,347.61

## STATEMENT

*Orphans' Home at Davenport from Oct. 1, 1877, to Sept. 30, 1879.*

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EXPENDITURES.

Total expenditures.....	\$39 864.50
Balance, cash on hand Oct. 1, 1879.....	4,008 11
Total.....	<u>\$43,872.61</u>

After a full and careful consideration of the needs of this institution, with a desire to make as limited requests as possible, I request that the following amounts be asked for as special appropriations for the coming two years:

For eight new cottages.....	\$16,000
For the erection and partial completion of one central building	15,000
For one school-building.....	4,000
For purchase of land.....	5,000
For industrial pursuits.....	1,300
For general repairs.....	1,500
For furniture.....	3,000
For library.....	200
Total.....	<hr/> \$46,000

I wish to call your attention to the plan upon which Michigan is conducting her Orphans' Home, as I believe it to be the best within my knowledge, and recommend that a similar plan be adopted by Iowa as soon as practicable, that Iowa may take her place in this important work.

Since writing the above, a letter has come to hand from Bousquet & Ryan, of Pella, Iowa, informing me that Jacob L. Bouman, deceased, left the sum of \$300 as a bequest to this institution. This is cheering news to all friends of the Orphans' Home. The time is near when others will remember the institution in a similar manner.

Thanks are due the clergy of the city for their kindness in preaching in turn to us on Sabbath afternoons. We also wish to return thanks to the C., R. I. & P. R. R. and the Davenport & St. Paul R. R. for the many favors granted. We return thanks to the publishers of the following for donations of the same: *Davenport Gazette*, daily; *Davenport Democrat*, daily; *Des Moines State Register*, daily (a partial donation); *State Press*, Iowa City; *The Presbyterian*, Philadelphia; *Cleveland Herald*; *Hartford Courant*; *Lippincott's Magazine*; *Western Rural*, Chicago; *Clinton Herald*; *Examiner and Express*, Lancaster, Penn.; *Arthur's Home Magazine*; *Christian Union*, N. Y.; *National Republican*, Washington, D. C.; *American Agriculturist*; *Burlington Hawkeye*, weekly; *Home Weekly*, Xenia, Ohio; *Grand Rapids Eagle*; *The Christian Woman*, Philadelphia.

Thanking you, gentlemen, for your counsel and support in the performance of my duty, I submit this, my sixth biennial report, for your consideration.

Yours respectfully,

S. W. PIERCE, Supt.

Davenport, Iowa, Sept. 30, 1879.

TREASURER'S REPORT.

MUSCATINE, Sept. 30, 1879.

To the Board of Trustees of the Iowa Soldiers' Orphans' Home, and Home for Indigent Children.

GENTLEMEN — I have the honor herewith to hand you my biennial report of funds received and disbursed, as Treasurer of the Home, from the ninth day of June, 1878, to the thirtieth day of September, 1879, inclusive.

C. C. HORTON, in account with State of Iowa :

DR.

1878.		
June 9.	To Auditor's warrant, for library.....	\$ 100.00
June 9.	To Auditor's warrant, repairs.....	1,000.00
June 9.	To Auditor's warrant, furniture.....	200.00
June 9.	To Auditor's warrant, reimburse support fund..	1,800.00
June 9.	To Auditor's warrant, I. Kirk & Son.....	425.00
June 9.	To received R. P. Spear, Treasurer.....	1,480.00
July 10.	To Auditor's warrant, support fund.....	1,450.00
Aug. 3.	To Auditor's warrant, support fund.....	1,400.00
Sept. 3.	To Auditor's warrant, support fund.....	1,370.00
Oct. 7.	To Auditor's warrant, support fund.....	1,330.00
Nov. 16.	To Auditor's warrant, repairs.....	500.00
Nov. 16.	To Auditor's warrant, furniture.....	300.00
Dec. 24.	To Auditor's warrant, support fund.....	1,083.33
1879.		
Jan. 10.	To Auditor's warrant, support fund.....	2,422.50
Feb. 6.	To Auditor's warrant, support fund.....	1,141.66
Feb. 9.	To Auditor's warrant, library.....	100.00
Mar. 7.	To Auditor's warrant, support fund.....	1,129.16
April 5.	To Auditor's warrant, support fund.....	1,124.99
May 5.	To Auditor's warrant, support fund.....	1,120.82
June 7.	To Auditor's warrant, improvement fund.....	1,000.00
June 7.	To Auditor's warrant, support fund.....	1,183.32
July 25.	To Auditor's warrant, support fund.....	1,196.00
Aug. 25.	To Auditor's warrant, support fund.....	1,158.33
Sept. 6.	To Auditor's warrant, support fund .....	1,120.82
Total.....		\$25,135.93

CREDIT.

By amount paid S. W. Pierce, Superintendent, by order of Board of Trustees.....		\$25,135.93
Total .....		\$25,135.93

Respectfully submitted,  
CHAS. C. HORTON, Treas.

## PHYSICIAN'S REPORT.

*To the Board of Trustees of the Iowa Soldiers' Orphans' Home:*

DURING the two years which have intervened since my last biennial report, the health of the children has been comparatively good. No disease in epidemic form, except measles, has invaded the institution. In the spring months of 1878, there occurred considerable sickness on account of the introduction of measles from Polk county. Two children were permitted to enter too soon after the acute stage of the disease had subsided, and as a consequence the germ was propagated to the extent of confining forty-seven (47) of the inmates. It was several months before the *sequelæ* of the epidemic entirely passed away. No serious complications developed in any of the cases. All of them fully recovered. So far as I am able to determine, all of the children have now had this as well as most of the epidemic diseases of childhood, not including scarlet fever. Vaccination has been thoroughly performed, and all are now considered reasonably safe against the influence of small-pox. Malarial diseases have been quite prevalent in all parts of the Mississippi valley during the period comprised by this report; but only two cases of bilious fever have originated in the Home. Taking this fact and comparing it with the peculiarly favorable season for generating epidemic germ diseases, the location of the institution is considered salubrious and healthful. There have been two cases of fractures of the bones of the lower extremities. Both cases recovered with useful and undeformed legs. Sore eyes, formerly so prevalent, are now rarely seen. One important fact should be mentioned concerning the "eye cases" of the past. In no instance has a child left the Home with defective vision, which originated in the institution.

I have thoroughly looked after the hygienic condition of the surroundings of the children, and have found them uniformly good except in one important particular, viz.: the sub-homes (cottages) of most of the children cannot be commented upon with favor. The old cottages are very poor, and in their present condition badly, very badly, adapted to the needs of the children. Should we pass another winter without the occurrence of considerable lung fever, bronchitis, diphtheria, colds, etc., etc., I will be much surprised. New cottages, like the two erected at a small cost about two years since, are wanted. I trust, for the sake of the children, that you will be able to efficiently attract the attention of the people's representatives to this great and pressing want of the institution.

The food and clothing are of good quality, and in quantity ample. I desire to express my appreciation of the valuable services of the superintendent and matron. In every particular have I found Mr. and Mrs. Pierce ready to do their utmost for the comfort and welfare of the inmates.

Yours, respectfully,

W. F. PECK, Surgeon.



## APPENDIX.

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A PAPER READ BEFORE THE ASSOCIATION OF CHARITIES OF CHICAGO, BY  
S. W. PIERCE, OF DAVENPORT, IOWA, JUNE 11, 1879.

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HAVING been requested by the Trustees of the Iowa Soldiers' Orphans' Home, and home for indigent children, to represent them in this body, I will say briefly that this institution, located at Davenport, was organized, in 1863, as a home for soldiers' orphans. Since then 2300 soldiers' orphans have enjoyed the comforts, education, and training of this institution. In July, 1876, it was opened to all indigent children, and now as soldiers' orphans go out county orphans come in and take their places. The present enrollment is 142. Ninety-eight are the orphans of soldiers, and forty-four are county orphans. Their ages range from four to fifteen. Eighty-two are boys, and sixty are girls. Children are now sent to us through the supervisors of the several counties in the state. They are received as young as two years old, and can remain with us till they are sixteen, when they are returned to a parent or guardian. An extended correspondence is kept up with them after they leave us, with a view to know where they all are and how they are doing, as well as to keep up the homelike feeling and relations begun at the institution.

The Home is conducted upon the cottage plan. The buildings inclose about six acres in the central portion of a beautiful twenty-acre tract, and are built in the form of a hollow square, all facing the center. They were originally government barracks, in use during the late war. In many cases children, while in the Home, have occupied the same building that their fathers occupied while waiting marching orders. The buildings were given to the State by the General Government to be used as a home for soldiers' orphans. At this time they are rather dilapidated, except a chapel, two new brick cottages, and a laundry, recently built at a cost of \$9,000. These buildings are neat, substantial, and comfortable, and are located with a view of erecting others from time to time, as we have the means, till a complete collection of neat cottages shall be built on each side of one central administration building. The cottage plan is not the most showy, but is the most comfortable and healthful. If it is the more expensive to maintain, for help, food, fuel, lights, general repairs, etc., it is the less for physicians and medicines. Its successful management requires greater labor on the part of superior and subordinate officers, but the children are more readily graded and classified, and it is more healthful and homelike. My experience leads me to say that I think the cot-

tage plan far preferable to the congregate or hotel plan, for public institutions.

The allowance per annum for each child supported is \$100, and this we spend. Attention is given to industrial pursuits to as great an extent as our limited means will allow. The principal employments of the boys are farming, gardening, and raising small fruits; while the girls are employed at knitting, sewing, ironing, cooking, and general housework. There are belonging to the Home forty acres of land; from ten to twenty acres of other land are rented for cultivation. It is our aim to see that no child spends any time in idleness. The children are taught for nine months in the year in graded schools of a high order. The health of our children has always been remarkable. We have never had a case of diphtheria or scarlet or typhoid fever. From August, 1869, to January, 1873—three years and five months—with an average daily attendance of 308, we had no death. For the last two and a-half years, with an average daily attendance of 140, we have had no death. Our work is steadily gaining ground, as the masses become familiar with its success. County officials are often afraid of the expense to their county, and so decline to send needy children to us. The average legislator is willing to provide for the maintenance of penal institutions, because he must, in order to protect his home and little ones. Yet he too often sees no necessity for sustaining charitable institutions. Of those cared for in our Home, ninety-nine per cent have become useful citizens. From what I know of the ancestry and natural inclinations of our inmates, I feel that ten per cent of them, had they been left without the education, training, and care of this Home would to-day have been supported as criminals. I wish to raise my voice for war against allowing children to be supported in almshouses. Like begets like. County officials need educating in this matter. The masses need it. Legislators need it.

The children are the hope of the State and nation. I trust that we may each gain renewed strength by our intercourse here, and be better prepared to infuse into the masses, and all in authority in our land, a lasting purpose to protect, care for, and properly educate the unfortunate poor, and especially the youth. This duty we owe to them and to ourselves. It is a noble work. It is Christ-like and will be successful.

*Soldiers' Orphans' Home and Home for Indigent Children, Davenport, Iowa, June 1, 1879.*





REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
SOLDIERS' ORPHANS' HOME,  
LOCATED AT  
DAVENPORT.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.



## REPORT.

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TO THE EIGHTEENTH GENERAL ASSEMBLY:

THE Joint Committee appointed to visit the Soldiers' Orphans' Home, at Davenport, would respectfully report that they have made a careful and quite thorough examination into its various departments, the management of the children, the condition of the buildings, the wants of the institution, the books of account, and a special examination in the direction suggested and directed by the concurrent resolution of instruction.

Your committee conclude:

That the management of the Home and its interests are in faithful and competent hands.

All of the buildings except the new bricks are really unfit for use, and if the Home is to be continued, as your committee think is for the best interests of the State, eight new cottages must be built, which would probably cost about sixteen thousand dollars. We recommend that an appropriation be made to build as many of these cottages as the state of the public treasury will admit.

The Superintendent and Matron seem to be deeply interested in the welfare of the children under their care and control, personal supervision being constantly maintained. The personal cleanliness, the intellectual, moral and religious training of the children are scrupulously observed. Your committee examined carefully into the clothing, the beds and bedding, the diet, the general care of the children, and heartily indorse it. The wants and necessities of the younger ones are carefully met. The sanitary condition of the Home is excellent; and it is probably owing in a great measure to regular habits and healthful and abundant food.

A library of about twelve hundred volumes, very properly divided as to subjects, is accessible to the children. The trustees ask an appropriation of two hundred dollars for said library, which your committee would respectfully recommend. An appropriation is also asked for repairs. Something is needed, but the exact amount will depend largely upon the number of new cottages built. As to the other items for which appropriations are asked, your committee is in doubt as to the amount that should be appropriated, but recommend as liberal dealing with the institution as the state of the public treasury will permit of, believing that it is doing a valuable work for the State, growing good, self-supporting citizens out of those, many of whom would otherwise remain through life her wards.

Your committee has examined the last report of this institution to your honorable body, and finding it correct, would refer to said report for a more specific statement of the past work and expense and the present needs of this Home.

The class for whom the Home was originally intended is passing away, but there are a large number of indigent orphan children in the various county poor-houses of the State. These children, in the opinion of your committee, should be removed to the Home. Some law should be enacted compelling the counties to send them there, and furnish compensation for their support and education.

Your committee have examined House File No. 274, A Bill for An Act to provide for the future care of indigent children, and are inclined to the belief that it should become a law.

In response to the inquiries propounded in the Concurrent Resolution, your committee would answer:

*First.* We are of the opinion that the appropriations made by the last General Assembly have been wisely and economically expended.

*Second.* That they have been expended for the objects appropriated.

*Third.* That chapter 67, Laws of the 17th General Assembly, have been complied with in not contracting indebtedness in excess of the appropriations.

*Fourth.* That there has been no diversion of any money from the specific purpose for which it was drawn out of the State Treasury.



*Fifth.* The following is a list of the persons employed by the Home, showing for what employed and at what monthly salary:

Number.	NAME.	DUTY.	PER MONTH.	BOARDED IN INS.
1	S. W. Pierce.....	Superintendent .....	\$ 100 00	Boarded in Ins.
2	F. W. Pierce.....	Matron .....	50 00	Boarded in Ins.
3	W. F. Peck.....	Physician .....	33 35	Not boarded in Ins.
4	P. A. Steffa.....	Book-keeper .....	20 00	Boarded in Ins.
5	Edwin Wrench.....	Watchman .....	12 00	Boarded in Ins.
6	H. Meade.....	Baker .....	26 00	Boarded in Ins.
7	N. B. Collier.....	Laborer .....	15 00	Boarded in Ins.
8	A. G. King .....	Engineer and carpenter	26 00	Boarded in Ins.
9	R. J. Evans.....	Cottage manager.....	20 00	Boarded in Ins.
10	M. F. Rudolph.....	Cottage manager.....	20 00	Boarded in Ins.
11	N. Connor.....	Cottage manager.....	20 00	Boarded in Ins.
12	S. J. Edwards .....	Cottage manager.....	20 00	Boarded in Ins.
13	R. A. Painter.....	Cottage manager.....	20 00	Boarded in Ins.
14	Lida Middleton.....	Teacher .....	25 00	Boarded in Ins.
15	Jennie Middleton...	Teacher .....	25 00	Boarded in Ins.
16	Ida Wagener .....	Sewing-room manager..	15 00	Boarded in Ins.
17	Mrs. L. Haid.....	Seamstress .....	10 00	Boarded in Ins.
18	Lois Talbot.....	Seamtress and knitter..	6 00	Boarded in Ins.
19	Mary S. Joy.....	Kitchen, D. & H. Man..	20 00	Boarded in Ins.
20	Ella McDonald.....	Kitchen help.....	10 00	Boarded in Ins.
21	Mrs. Lizzie Burrell.	Supt's housekeeper.....	12 00	Boarded in Ins.
22	Mary Mulcron.....	Laundry manager.....	15 00	Boarded in Ins.
23	Maggie Mulcron....	Laundress .....	12 00	Boarded in Ins.

J. D. GILLET,  
*On part of the Senate.*  
  
S. L. GLASGOW,  
J. L. PALMER,  
*On part of the House.*





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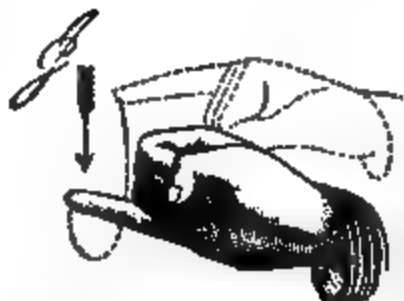
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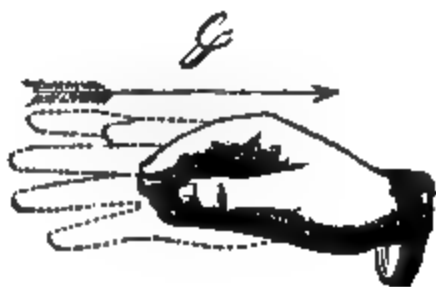
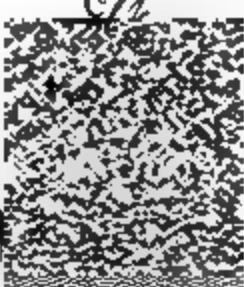


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THIRTEENTH BIENNIAL REPORT

OF THE

IOWA INSTITUTION

FOR THE EDUCATION OF THE

DEAF AND DUMB

AT

COUNCIL BLUFFS,

TO THE

GOVERNOR OF THE STATE,

FOR 1878 AND 1879.

---

*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.



# TRUSTEES AND OFFICERS.

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## BOARD OF TRUSTEES:

FRED. TEALE, PRESIDENT.

JOHN H. STUBENRAUCH, TREASURER.

ALFRED HEBARD.

## SUPERINTENDENT:

MOSES FOLSOM.

## TEACHERS:

EDWIN SOUTHWICK.

JOHN A. KENNEDY.

CONRAD S. ZORBAUGH.

MARY E. KENNEDY.

JAMES SIMPSON.

SUE. ZORBAUGH.

MARGARET B. SOUTHWICK.

MARGARET POLLOCK.

## PHYSICIAN:

H. W. HART, M. D.

## MATRON:

SARAH E. WRIGHT.

## ASSISTANT MATRON:

ELIZABETH WILLARD.

## BOYS' SUPERVISOR:

PETER WEST.

## FOREMAN OF THE SHOE-SHOP:

W. B. HEATH.

## FOREMAN OF THE BROOM-SHOP:

C. H. W. BROWN.





# REPORT OF THE TRUSTEES

OF THE

IOWA INSTITUTION FOR THE DEAF AND DUMB.

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*To THE HON. JOHN H. GEAR, Governor of Iowa:*

The Board of Trustees for the Deaf and Dumb Institution submit the following report:

Assuming control in May, 1878, they at once reorganized the management in accordance with the expressed policy of the General Assembly at their last session. Fears were professedly entertained by some, that the economies made necessary by legislative action, might embarrass the support of the institution and hinder it somewhat in the performance of its charitable work. These fears, however, proved to be groundless. The Support Fund reduced from \$40 to \$30 per quarter, has proved to be more than sufficient to meet the cost of all needed supplies without diminishing quantity or impairing quality. An advance in prices may make a difference hereafter. The fund for teachers and official incumbents, formerly \$12,000, but now reduced to \$8,000, has been sufficient until the recent large increase in the number of scholars, requiring an increase of teachers. It may be necessary to restore this item for teachers, etc., to the original amount of \$12,000, as the school already is nearly doubled. It is believed by the members of the Board, that (though not experts themselves) the educational department is equal in point of efficiency, to that of any other institution of the kind. Teachers are zealous and faithful, scholars earnest and attentive. Industrial pursuits have not been neglected, believing that knowledge and training in that direction are quite as valuable as a knowledge of letters and figures. Potatoes enough for the supply of the tables, and broom-corn enough for broom manufacture are some of the results of their labor.

The General Assembly appropriated \$40,000 to re-construct the main building. Materials were purchased and the work was done by the day. The result appears to have justified this course, as the total cost of building, including plumbing, heating, etc., amounted to \$34,500, of which \$33,000 was drawn during the last fiscal year. The remaining \$1,500 will be needed to meet outstanding bills, leaving a balance unexpended of \$5,500. The trustees would recommend that this balance, or so much thereof as may be needed, be expended in completing the building designed and commenced some years ago, as a coal, engine, and wash house, but not finished for want of funds, and if anything be left, it be expended on the grounds. They also recommend an allowance of \$2,000 for bedding and furniture—increasing numbers will make this a necessity.

Concurrent testimony favors the introduction of type-setting and printing into institutions of this kind. We, therefore, recommend an appropriation of \$1,000 for this purpose. The new building has furnished ample room thus far for all applicants, but if they continue to increase as they have done of late, its maximum capacity will soon be reached. In view then of the large number of mutes in the State, and the reasonable probability that they will continue to seek admission as they are now doing, the question arises whether it would not be wisdom on the part of the General Assembly to provide seasonably for their accommodation, by making an appropriation for the reconstruction of the east wing. For most of the details in the management, we refer to the report of the Superintendent. A statement of building expenses is herewith submitted, vouchers for which are filed with the Auditor of State.

#### REBUILDING MAIN BUILDING.

Appropriation.....	\$40,000.00
Amount Auditor's warrants drawn.....	33,000.00
	<hr/>
Balance appropriated and undrawn.....	\$ 7,000.00
Outstanding orders.....	1,322.92
	<hr/>
Cost of rebuilding.....	\$34,322.92
Balance appropriated and not needed.....	5,677.08

**EXPENSE OF REBUILDING—CLASSIFIED STATEMENT OF DISBURSEMENTS.**

For excavating.....	\$ 407.51
Stone-cutting.....	223.00
Brick-laying.....	1,681.25
Carpenter work.....	4,274.90
Laborers.....	2,078.53
Teaming.....	83.60
Painting.....	1,162.00
Plastering.....	1,782.25
Heating and plumbing.....	4,664.13
Pavement.....	379.44
Paints and oils.....	509.69
Freights paid.....	4.50
Lumber.....	10,378.49
Sundries.....	32.75
Tools, rope, etc.....	75.42
Sand and hauling.....	103.41
Iron.....	136.88
Hardware and nails.....	613.88
Lime, hair and plaster.....	637.75
Brick.....	1,080.05
Discounts on warrants.....	207.65
Tin roof and spouting.....	1,188.33
Superintendence and expenses.....	1,040.15
Fire-escapes.....	43.36
Foreman.....	765.00
Sewer-pipe.....	69.00
Total.....	<u>\$34,322.92</u>
Amount drawn from State treasury.....	<u>33,000.00</u>
Balance due at close of fiscal term.....	\$ 1,322.92

Respectfully submitted.

FRED. TEALE.

A. HEBARD.

J. H. STUBENRAUCH.

## REPORT OF THE SUPERINTENDENT.

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*To the Hon. JOHN H. GEAR, Governor of Iowa:*

I HEREWITH respectfully submit to you, for transmission to the 18th General Assembly, the Thirteenth Biennial report of the Iowa Institution for the Deaf and Dumb.

The period under review was one full of events to the Institution; witnessing the occupancy of the new west wing; a complete change in the Board of Trustees; the resignation of the Superintendent, four teachers, and the Steward; a reduction in the support funds; the rebuilding and occupancy of the main building; and the first death of a pupil at the Institution.

The school-year of 1878 opened in November, 1877, two months late, owing to the delay in finishing the wing, occasioned by the unroofing of the building by a storm in the preceding August. The new class of 1877 was excluded for want of room, and only two new pupils were received.

The following exhibit shows the arrangement of classes and the studies pursued, during the term:

**FIRST CLASS**—17 pupils, Mr. Kennedy, teacher.

*Studies:* Thalheimer's Universal History; Brown's Physiology; arithmetic; composition; and Sabbath lessons from Luke.

**SECOND CLASS**—19 pupils, Mrs. Gillespie, teacher.

*Studies:* Hooker's Childs' Book of Common Things; Peet's Course of Instruction, Part III; arithmetic; composition; and Sabbath lessons from Mark.

**THIRD CLASS**—18 pupils, Miss Israel, teacher.

*Studies:* Eclectic Geography No. 1; Peet's Course of Instruction, Part III; arithmetic; and The Story of the Bible.

**FOURTH CLASS**—20 pupils, Mrs. Zorbagh, teacher.

*Studies:* Eclectic Geography No. 1; arithmetic; and Peet's Scripture lessons.

**FIFTH CLASS**—17 pupils, Miss Brown, teacher.

*Studies:* Latham's Primary Reader; arithmetic; and Peet's Scripture lessons.

**SIXTH CLASS**—16 pupils, Mr. Southwick, teacher.

*Studies:* Same as fifth class.

**ARTICULATION CLASS**—Mr. Gillespie, teacher.

The Seventeenth General Assembly reduced the number of Trustees from five to three, and in accordance with the law making the change, the new Board, Messrs. Fred. Teale, Alfred Hebard and John H. Stubenrauch, assumed control in May, 1878. In July, Mr. Talbot, after thirteen years of faithful service as Superintendent, resigned; and the present incumbent was appointed. Other resignations followed: Mr. and Mrs. Gillespie and Misses Israel and Brown, teachers, and Mr. Taylor, Steward. The retirement of so many old and efficient employes was a matter to be regretted, and the Trustees were subjected to much anxiety in their efforts to fill the vacant positions.

The same General Assembly appropriated \$40,000 to rebuild the main building, the appropriation to be drawn in two installments, \$5,000 in April, 1878, and \$35,000 one year later. The Trustees, however, realizing the imperative necessity of increased accommodations, as shown by the constant accessions to the number of applicants for admission, yielded to the pressure, and, after making advantageous negotiations for material, ordered the work to be commenced. Active operations began in July, 1878, and by October, under the skillful management of Messrs. Thos. Teale and Lyman Foregrave, needed rooms in the new structure were ready for occupancy, and school opened on the 23d of that month, with an attendance of 120, a number which was increased to 143 before the close of the term. Work was generally suspended during the winter; but in the spring and summer of the current year the building was finished, as the law directed: "in a plain and substantial manner," leaving a handsome balance of \$5,500 undrawn in the State treasury. While the outside of the restored building possesses but few architectural graces, the inside finish is greatly superior to that of the old structure. Fire-escapes, accessible from each floor, have been added, and extra precautions taken against fire, by increasing the number of fire-plugs, furnished with sufficient hose to reach every part of the building. We believe this institution is the only one in the State furnished with fire-

escapes. An improvement was also made in the manner of heating the building, by direct radiation, instead of through ventilators. Gas fixtures enough were taken from the wing to furnish the main building.

School opened October 23d, 1878, with 120 pupils in attendance and four new teachers: Mr. James Simpson, a semi-mute gentleman of fine attainments, and a graduate of the New York Institution; Mrs. J. A. Kennedy, a speaking lady, well qualified for the position, having served the institution for several years as Assistant Matron; and Miss Margaret Palmer, of Chariton, and Miss Margaret Pollock, of Burlington, both young ladies of ability and peculiarly fitted by education and temperament for their positions. In December Mrs. M. B. Southwick, a semi-mute lady of experience, was added to the corps of teachers. In May, 1879, Miss Palmer, owing to poor health, was compelled to resign, a fact much to be regretted, as she seemed destined to take high rank in the profession. Her place was filled by the appointment of Mrs. C. S. Zorbaugh, a former deaf-mute teacher of acceptable record.

The following exhibit shows the arrangement of classes and the studies for the year:

**FIRST CLASS**—15 pupils; Mr. Kennedy, Principal.

*Studies:* Swinton's Primary U. S. History; Eclectic Geography, No. 1; Peet's Course of Instruction, Part III; arithmetic; composition; and Bible lessons in Matthew.

**SECOND CLASS**—18 pupils; Mrs. Kennedy, teacher.

*Studies:* Hooker's Child's Book of Common Things; Eclectic Geography, No. 1; Peet's Course of Instruction, Part III; stories; composition; arithmetic; and the Story of the Bible.

**THIRD CLASS**—16 pupils; Mr. Simpson, teacher.

*Studies:* Eclectic Geography, No. 1; Peet's Course of Instruction, Part III; arithmetic; composition; and Peet's Scripture lessons.

**FOURTH CLASS**—15 pupils; Miss Palmer, teacher.

*Studies:* Montieth's First Lesson's in Geography; Latham's Primary Reader; composition; arithmetic; and Peet's Scripture lessons.

**FIFTH CLASS**—18 pupils; Mr. Southwick, teacher.

*Studies:* Latham's Primary Reader; arithmetic; composition; and Peet's Scripture lessons.

**SIXTH CLASS**—21 pupils; Miss Pollock, teacher.

*Studies:* Latham's First Lessons; exercises in arithmetic and composition; and Peet's Scripture lessons.

**SEVENTH CLASS**—21 pupils; Mr. Zorbough, teacher.

*Studies:* Same as Sixth Class.

**EIGHTH CLASS**—24 pupils; Mrs. Southwick, teacher.

*Studies:* Same as Sixth Class.

Fifty-two new pupils were admitted during the year, and the statistics concerning them are herewith added :

NATIVITY OF PUPILS.

Iowa.....	37	Norway.....	2
Indiana .....	2	New York.....	1
Tennessee.....	2	Ohio.....	1
Minnesota....	1	Massachusetts.....	1
Nevada .....	1	Germany.....	1
Pennsylvania.....	1	Missouri.....	1
Kansas.....	1		

ALLEGED CAUSES OF DEAFNESS.

Congenital .....	10	Typhoid fever.....	3
Spinal fever.....	10	Gatherings in head.....	2
Cerebro-spinal menengitis .....	9	Spasms .....	1
Scarlet fever.....	8	Scrofula.....	1
Unknown .....	9	Fall on the head.....	1

The cerebro-spinal menengitis, spotted or spinal fever, was not known as a contagious or epidemic disease before 1840, yet since that time it has taken the place of scarlet fever, as the deadliest foe among children to the sense of hearing.

The health of pupils and employes has been remarkably good, and with the exception of some thirty cases of diptheria, a scourge which happily passed without fatal issue, a result consequent upon faithful nursing and attention by the matrons, the nurses, and the attending physician, Dr. A. B. McKune, no complaint, other than ordinary colds, has afflicted the inmates of the Institution. The term, however, did not pass without a fatality, coming in the accidental drowning, on June 7th, of little Willie Andrews, of Sabula, Jackson county, while bathing in Mosquito creek, a small stream near the Institution grounds. His was the first death among the pupils at the Institution since its

location at Council Bluffs in 1870, and the third since the school was founded; by a singular co-incidence two boys having met their death in a similar manner at Iowa City before removal.

That a certain percentage, estimated at from ten to thirty, of deaf mutes can be taught to articulate is an established fact, and during the coming term a teacher will be employed to fill the vacancy caused by the resignation of Mr. Gillespie. Our pupils who retain to any extent the art of speech are placed, as far as possible, with hearing and speaking teachers, and encouraged to use whatever voice they may have, in their various recitations. Those unacquainted with the subject have no idea of the obstacles in the way of the deaf-mute learner of articulate sound. With unused and unmanageable vocal organs, no knowledge of sounds or words, and no ear to guide the pronunciation, his task of acquiring speech is one of great difficulty, and results of any importance come only after long and persistent effort on the part of an active mind. It is a question in a majority of cases whether articulation can be of lasting benefit. It is a well-known fact that speaking persons who lose their hearing, even at an adult age, after having had full knowledge and possession of speech, gradually lose the power to articulate. If this is true of speaking persons, how can the mechanically acquired speech of the deaf endure?

The industrial department of the Institution has been productive of good, qualifying quite a number of boys in the trades of shoe-making and broom-making. A small outlay of money for tools and material, and a right use of the knowledge gained in the shops here, will establish any boy of spirit and ambition in a business for himself. Printing is a trade practiced in nearly every similar institution, and newspapers published, except in Iowa. Printing has an advantage over other industries, inasmuch as the pupil, while learning a trade, gets additional training in the use of language. The domestic classes—sewing, ironing, dish-washing, and sweeping—under the direction of the Matrons, assist materially in the household work. While the labor is not arduous, it gives the girls needed exercise, and at the same time a knowledge of domestic duties. Cooking, washing and scrubbing might be added to the course of domestic instruction to the decided future advantage of the recipient.

From records on file in the Institution, the number of uneducated deaf-mutes, between the ages of 6 and 20, is given by counties, in the following table:



Adams .....	1	Jackson .....	11
Allamakee .....	10	Jasper .....	3
Appanoose .....	7	Jefferson .....	1
Benton .....	5	Johnson .....	7
Black Hawk .....	4	Jones .....	2
Boone .....	1	Keokuk .....	2
Bremer .....	2	Lee .....	2
Buchanan .....	1	Linn .....	6
Butler .....	5	Louisa .....	2
Calhoun .....	1	Lucas .....	2
Carroll .....	1	Madison .....	1
Cass .....	3	Mahaska .....	1
Cedar .....	1	Marion .....	1
Cerro Gordo .....	2	Marshall .....	5
Chickasaw .....	1	Mitchell .....	4
Clarke .....	1	Monroe .....	2
Clayton .....	5	Muscatine .....	1
Clinton .....	5	Plymouth .....	2
Dallas .....	4	Polk .....	5
Davis .....	2	Pottawattamie .....	3
Decatur .....	1	Poweshiek .....	1
Delaware .....	2	Ringgold .....	4
Des Moines .....	4	Scott .....	12
Dickinson .....	1	Story .....	2
Dubuque .....	18	Tama .....	8
Fayette .....	8	Taylor .....	1
Floyd .....	1	Van Buren .....	2
Fremont .....	2	Wapello .....	1
Greene .....	1	Warren .....	2
Grundy .....	1	Washington .....	2
Guthrie .....	1	Wayne .....	4
Hardin .....	3	Webster .....	3
Harrison .....	4	Winnebago .....	3
Henry .....	1	Winneshiek .....	6
Howard .....	2	Woodbury .....	2
Humboldt .....	1	Worth .....	1
Iowa .....	1	Wright .....	1

This compilation shows in seventy-four counties a total number of 242 children, of whom the greater part should be in school. A compulsory law would bring out 400 pupils. The welfare of the mutes of the State would be promoted by a removal of the limits of age, and allow them to remain as long as their progress and conduct would warrant. The time, seven years allowed by the law of the State, is too short to accomplish a work of any great value, particularly in combining the two methods: mechanical speech and mental development through signs. Ohio gives ten years, New York twelve, and other states like periods, to deaf-mute pupils. The hearing and speaking child when just ready to go to school often has a greater command

of language than the deaf-mute when compelled to leave the Institution by the expiration of the allotted time.

The following table shows the average number of pupils present each term, and the cost of support, since the opening of the Institution :

YEARS.	PUPILS.	SUPPORT.
1855-6.....	40.....	\$ 8,991.67
1857 .....	45.....	9,803.82
1858-9.....	50.....	16,014.21
1860-1.....	55.....	14,847.87
1862-3.....	58.....	16,794.73
1864-5.....	65.....	19,872.27
1866-7.....	75.....	24,587.30
1868-9.....	90.....	29,887.82
1870-1.....	95.....	42,914.13
1872-3.....	115.....	56,221.81
1874-5.....	130.....	65,572.39
1876-7.....	135.....	65,783.44
1878 .....	99.....	28,101.64
1879 .....	135.....	24,308.01
		\$ 52,409.65

It is doubtful if at any period one-half of the deaf-mute school population has enjoyed the benefits of the Institution. By reference to the table given elsewhere it will be seen that 242 children, of whom the large proportion should be at the Institution, are not availing themselves of the generosity of the State. The number present at the date of this report, November 1st, is 170, which leaves the record thus: of the school population present, two-fifths; absent, three-fifths. A like showing among the hearing and speaking youth of the State would place Iowa low among the states in the scale of illiteracy.

The Institution has been favored during the term by frequent gubernatorial visits, and pupils and employes express gratification at the interest taken by the chief executive of the State in the welfare of the school. The Institution was also favored by visits from Revs. T. H. Gallaudet and A. W. Mann, distinguished workers in the cause of deaf-mute religious education.

A convention of instructors was held at Columbus, Ohio, in August, 1878, at which this Institution was represented by Messrs. Kennedy and Zorbaugh, who reported the gathering to have been one of mutual interest to all present.

The list of pupils present during the term, with the required information, will be found in another place; also the detailed statement of receipts and expenditures, as required by law.

In an appendix will be found a cut of the manual alphabet, and several articles on the early home training and teaching of deaf-mute children; methods of instruction, and some facts concerning deafness.

The conduct of the pupils during the term has been excellent; their industry, in and out of school, praiseworthy, and their progress satisfactory. We acknowledge the services of a corps of teachers whose diligence and intelligence brought about these pleasing results.

#### ACKNOWLEDGMENTS.

The following papers have been sent to the Institution during the past term free of charge. The thanks of the institution are hereby tendered the publishers, and a continuance of their favors is solicited:

Adams County Union, J. C. Burch; Anamosa Eureka, E. Booth & Son; Albia Union, Val Mendel; Avoca Delta, J. C. Adams; Audubon County Sentinel, H. P. Albert; Atlantic Telegraph, Lafe Young; Buchanan County Bulletin, Wm. Toman; Burlington Gazette, Gazette Printing Co.; Cedar Rapids Times, Ayers & McClelland; Centerville Citizen, W. O. Crosby & Co.; Christian Cynosure, E. A. Cook & Co.; Clarksville Star, J. O. Stewart; Creston Democrat, Ed Russell; Clayton County Journal, Shannon & Co.; Council Bluffs Nonpareil, Nonpareil Printing Co.; Chariton Patriot, G. H. Ragsdale; Davenport Democrat, Richardson Bros.; Deaf Mute Advance, Frank Read; Deaf Mute Index, Colorado Institution; Deaf Mute Journal, H. C. Rider; Deaf Mute Mirror, Michigan Institution; Deaf Mute Record, Missouri Institution; Delmar Journal, F. R. Bennett; Dubuque Times, Woodruff & Perkins; De Witt Observer, S. H. Shoemaker; Educator, New York Institution; Gate City, Howell & Clark; Glenwood Opinion, Opinion Printing Co.; Goodson Gazette, Virginia Institution; Grinnell Herald, L. A. Cravath; Greene County Gazette, Neil Brown; Harrison County Courier, Alpheus Davison; Howard County Times, L. E. Smith; Indianola Herald, Graham & Knox; Iowa State Register, Clarkson Bros.; Iowa State Reporter, Parrott, Girton & Sherman; Iowa State Press, John P. Irish; Iowa State Leader, Leader Printing Co.; Jefferson Bee, Rhoads & Gray; Kentucky Deaf Mute, Kentucky Institution; Kansas Star, Kansas Institution; Laporte City Progress, Jesse Wasson; Lyons Mirror, Beers & Eaton; Marengo Republican, Spering & Crenshaw; Mute Journal of Nebraska, Nebraska Institution; Mutes' Companion, Minnesota Institution; Marysville Miner, C. T. McConnell;

Muscatine Journal, Mahin Brothers; Mutes' Chronicle, Ohio Institution; Ottumwa Courier, A. H. Hamilton; Pella Blade, S. S. King; The Tablet, West Virginia Institution; The Texas Ranger, Texas Institution; Villisca Review, Powers & Kennedy; Vinton Eagle, Rich & Murphy; Western Farm Journal, G. Sprague; Winterset Madisonian, Goodale & Miller; Wayne County Republican, Allen & Le Compte.

The following contributions have been made to the institution, for which thanks are tendered the donors:

Public documents from Hon. W. F. Sapp, Hon. W. B. Allison, Hon. J. Eaton, Jr., Hon. F. Watts, Gen. A. J. Meyer, and the Smithsonian Institute. Prof. Gustavus Hinrichs, of the State University, has favored us with his Iowa Weather Reports, for which he has our thanks.

Thanks are tendered the managers of the Chicago, Burlington and Quincy Railroad, the Chicago, Rock Island and Pacific Railroad, the Chicago and Northwestern Railway, the Sioux City and Pacific Railroad, and the Kansas City, St. Joseph and Council Bluffs Railroad, for their kindness in passing our pupils at reduced fares.

MOSES FOLSOM,

*Supt. of the Iowa Institution for the Deaf and Dumb.*

## LIST OF PUPILS IN THE INSTITUTION DURING THE YEARS 1878 AND 1879.

## MALES.

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## LIST OF PUPILS—CONTINUED.

NAMES.	ADMISSION.	Age.	COUNTY.
Wesley Dobson .....	September, 1872	10	Black Hawk .....
John Jacob Dold .....	September, 1874	9	Muscatine .....
William T. Douthart .....	September, 1869	12	Van Buren .....
Rasmus Duea .....	October, 1878	11	Story .....
Elmer Edgerton .....	September, 1873	13	Fremont .....
A. Jackson Evans .....	September, 1873	15	Wayne .....
Cyrus F. Farley .....	September, 1875	22	Wapello .....
William D. Farley .....	September, 1875	15	Wapello .....
Harvey L. Farmer .....	January, 1875	13	Decatur .....
Judson S. Fleming .....	September, 1872	11	Linn .....
Joseph Fox .....	September, 1873	19	Johnson .....
Franklin Gall .....	September, 1869	10	Cedar .....
Jesse M. Gollaher .....	September, 1872	11	Appanoose .....
Charles Goodall .....	September, 1873	10	Crawford .....
Butler E. Goodrich .....	September, 1875	12	Clinton .....
Franklin S. Greer .....	September, 1871	12	Wayne .....
Curney Garvey .....	February, 1879	14	Fayette .....
Alfred A. George .....	December, 1878	17	Union .....
Isom P. Haworth .....	September, 1875	10	Hardin .....
John Hava .....	October, 1872	11	Adams .....
.....	October, 1876	9	Howard .....
Charles R. Hemstreet .....	October, 1874	10	Story .....
H. McP. Hofsteater .....	September, 1875	10	Washington .....
Henry Hocke .....	October, 1878	11	Greene .....
Arthur Hummel .....	November, 1878	14	Clayton .....
Jay G. Jackson .....	October, 1876	10	Greene .....
James S. Johnston .....	September, 1874	10	Marshall .....
Clarence P. Jones .....	March, 1879	10	Pottawattamie .....

Simon F. Langbehn.....	September,	Germany.....	Scarlet fever.....	Third.
Charles A. Locke.....	September,	Canada.....	Congenital.....	Third.
Jasner Lotridge.....	October,	Iowa.....	Spinal fever.....	First.
.....	September,	Iowa.....	Inflammation of the brain.....	Seventh.
.....	November,	Illinois.....	Congenital.....	Seventh.
Herbert W. Merrill.....	September,	Illinois.....	Scarlet fever.....	Fifth.
Perry Miles.....	September,	Iowa.....	Spotted fever.....	Eighth.
.....	September,	Iowa.....	Congenital.....	Fourth.
.....	October,	Iowa.....	Scarlet fever.....	First.
.....	October,	Iowa.....	Gatherings in the head.....	First.
LWight A. Metz.....	October,	Nevada.....	Cerebro-spinal meningitis.....	First.
John W. Metz.....	November,	Nevada.....	Scarlet fever.....	First.
Clarence K. McConnell.....	October,	Iowa.....	Cerebro-spinal meningitis.....	First.
John H. McCartney.....	November,	Pennsylvania.....	Unknown.....	First.
John O'Hene.....	October,	Iowa.....	Unknown.....	First.
Anton Elias Oleson.....	October,	Iowa.....	Scarlet fever.....	First.
Patrick O'Brien.....	.....	.....	.....	.....
Edwin J. Page.....	October,	Iowa.....	Congestive chills.....	Fourth.
Frank L. Perry.....	September,	Iowa.....	Paralysis.....	Fifth.
John P. Phalen.....	September,	Iowa.....	Spinal meningitis.....	Fourth.
Edwin Pyle.....	October,	Iowa.....	Unknown.....	First.
Charles Pattee.....	October,	Indiana.....	Sickness when two years old.....	First.
Clayton Pringle.....	November,	Iowa.....	Cerebro-spinal meningitis.....	First.
George S. Petro.....	October,	Illinois.....	Mumps.....	Second.
Jacob A. Reinier.....	November,	Iowa.....	Congestion of the brain.....	Eighth.
David R. Rickabaugh.....	September,	Ohio.....	Scarlet fever.....	Seventh.
Alfred J. Riser.....	September,	Switzerland.....	Congenital.....	Third.
Walter T. Ross.....	September,	Iowa.....	Sickness.....	Third.
David Ryan.....	October,	New York.....	Scarlet fever.....	First.
Joseph Rieger.....	October,	Iowa.....	Spinal fever.....	First.
George Roush.....	October,	Ohio.....	Congenital.....	First.
John Schattle.....	September,	Iowa.....	Scarlet fever and erysipelas.....	Seventh.
Zimrie Schilling.....	October,	Iowa.....	Scrofula.....	Seventh.
J. Frank Secor.....	October,	Iowa.....	Influenza.....	Sixth.
Walter M. Seelemeier.....	September,	Illinois.....	Chronic diarrhoea.....	Fourth.
Samuel H. Selman.....	October,	Iowa.....	Pneumonia.....	Third.
John Staudacher.....	September,	Germany.....	Cramp.....	Fourth.

\*Age at admission.

## LIST OF PUPILS—CONTINUED.

NAMES.	ADMISSION.	COUNTY.	NATIVITY.	CAUSE OF DEAFNESS.	SCHOOL YEAR.
J. Morris Sutton.....	September, 1873	Wayne	Ohio	Sickness and gatherings	Fifth.
O. Francis Sutton.....	September, 1873	Wayne	Iowa	Sickness and gatherings	Fifth.
Thomas Seay.....	October, 1878	Jasper	Iowa	Fever.....	First.
Alex. M. Saws.....	January, 1879	Lucas	Iowa	Typhoid fever.....	First.
Emil A. J. Schattle.....	September, 1888	Johnson	Canada	Brain fever.....	Eighth.
Daniel H. Taylor.....	September, 1874	Guthrie	Illinois	Fever.....	Fifth.
Daniel Tellier.....	September, 1874	Humboldt	Wisconsin	Typhoid fever.....	Fifth.
Albert W. Tetler.....	September, 1872	Scott	Texas	Typhoid fever.....	Sixth.
Zachariah B. Thompson.....	September, 1873	Story	Iowa	Congenital.....	Fourth.
Adelor Turgeon.....	October, 1876	Woodbury	Canada	Typhoid fever.....	Third.
Mons. O. Thompson.....	March, 1879	Allamakee	Iowa	Congenital.....	First.
Warren Walling.....	October, 1876	Mills	Utah	Gatherings in the ears.....	Third.
Elliott S. Waring.....	September, 1871	Polk	Iowa	Paralysis.....	Seventh.
Frisbie Weaver.....	September, 1873	Des Moines	Illinois	Congenital.....	Sixth.
D. Graham White.....	September, 1875	Dallas	Illinois	Inflammation of the brain.....	Third.
Gottlieb L. Willy.....	September, 1871	Scott	Iowa	Scarlet fever.....	Seventh.
Charles Wood.....	September, 1871	Mills	Iowa	Congenital.....	Seventh.
Newton E. Wymmer.....	October, 1878	Muscatine	Iowa	Measles.....	Third.
Gibson A. Whitmer.....	December, 1878	Cedar	Iowa	Spinal fever.....	First.

## FEMALES.

Lucinda Anderson.....	September, 1875	Marion	Iowa	er.....	Third.
May Armstrong.....	September, 1872	Madison	Iowa	ver.....	Seventh.
Ellen Baker.....	January, 1877	Muscatine	Ohio	er.....	Second.
S. Bertha Banks.....	September, 1873	Lee	Iowa	n of the brain.....	Sixth.
Mary E. Barker.....	September, 1873	Des Moines	Iowa	er.....	Sixth.



Emily M. Barnum	September,	1875,	14	Fayette	Iowa	Third.
Rachel Bergeson	October,	1876	13	Dickinson	Iowa	Third.
Margaret D. Bray	February,	1875	10	Pottawattamie	Indiana	Fourth.
Chloe J. Brink	September,	1874	10	Cedar	Iowa	Fifth.
Minnie Bowser	October,	1878	9	Wapello	Iowa	First.
Rose Boden	November,	1878	10	Plymouth	Iowa	First.
Cora M. Burroughs	October,	1878	12	O'Brien	Iowa	First.
Agnes M. Belanger	October,	1878	10	Harrison	Massachusetts	First.
sin	September,	1872	10	Black Hawk	Iowa	Sixth.
'	October,	1875	14	Taylor	Illinois	Third.
Jennie M. Chizum	September,	1874	10	Cass	Iowa	Fifth.
S. Ella Clark	September,	1874	11	Madison	Iowa	Fifth.
Nannie Bell Clayton	December,	1870	10	Pottawattamie	Iowa	Eighth.
Ginnie Cusack	October,	1878	10	Allamakee	Tennessee	First.
Carrie Custer	October,	1878	12	Shelby	Kansas	First.
Ann Davies	September,	1873	11	Carroll	Wales	Sixth.
Winnie E. Edgerton	September,	1875	10	Fremont	Iowa	Fourth.
Phebe M. Ellsworth	September,	1876	13	Allamakee	Iowa	Fourth.
Elizabeth Evans	September,	1874	15	Mills	Ohio	Fourth.
Miriane E. Emerson	December,	1878	10	Union	Iowa	First.
Caroline Foss	September,	1873	13	Winneshiek	Iowa	Fifth.
Jennie Freeborn	September,	1869	12	Polk	Illinois	Third.
Lizzie Fick	October,	1878	10	Jackson	Germany	First.
Matilda A. Galloway	September,	1874	11	Clinton	Iowa	Fifth.
Mary Grubb	September,	1875	11	Polk	Iowa	Fourth.
Maggie Gay	October,	1878	18	Scott	Missouri	First.
Mary Grady	December,	1878	11	Clayton	Iowa	First.
Jennie Hemer	October,	1876	10	Black Hawk	Iowa	Third.
Edith M. Hewitt	October,	1872	11	Butler	Iowa	Fourth.
Annie E. Hocke	September,	1871	12	Greene	Iowa	Seventh.
Nellie A. Hollingsworth	September,	1875	11	Appanoose	Iowa	Fourth.
Celestia V. Harrison	October,	1878	10	Story	Iowa	First.
Grace Hanna	October,	1878	10	Linn	Iowa	First.
Dora Jurgens	January,	1871	13	Mills	Germany	Seventh.
Annie E. Kenney	September,	1872	12	Clinton	Massachusetts	Seventh.
Margaret Kenney	September,	1872	10	Clinton	Iowa	Seventh.
Katie Kinkead	September,	1874	12	Lucas	Ohio	Fifth.

Cold in the head

\* Age at admission.



Martha J. Surber .....	September, 1869	11	Keokuk .....	Iowa .....	Seventh.
Margaret Sadler .....	October, 1878	12	Jackson .....	Iowa .....	First.
.....	October, 1878	12	Winneshiek .....	Norway .....	First.
.....	October, 1878	13	Winneshiek .....	Norway .....	First.
.....	April, 1879	11	Monroe .....	Iowa .....	First.
Estella M. Trimble .....	October, 1876	11	Henry .....	Iowa .....	Third.
Louisa Weber .....	November, 1870	14	Pottawattamie .....	Wisconsin .....	Eighth.
Martha Woods .....	September, 1874	13	Iowa .....	Iowa .....	Fifth.
Laura Wright .....	September, 1872	10	Des Moines .....	Iowa .....	Seventh.
Ella B. Williams .....	October, 1878	10	Appanoose .....	Iowa .....	First.
Lizzie S. Welirnan .....	October, 1878	11	Benton .....	Iowa .....	First.
Nancy E. Weaver .....	January, 1879	13	Page .....	Tennessee .....	First.
Ella D. Young .....	September, 1874	11	Wayne .....	Iowa .....	Fifth.

•Age at admission.

Total number in two years, 138; viz.: Males 105, Females 33.

## RECEIPTS.

Cash on hand, October 1, 1877 .....	\$ 4158 53
Cash from the State (regular appropriations and interest).....	52912 46
Cash from the State for furniture.....	2000 00
Cash from the State for clothing pupils .....	1146 72
Cash from the shop fund.....	904 01
Received from Dakota Territory, warrants and interest .....	381 00
Received from pupils, for clothing, shoes, etc.....	638 25
Received for board.....	442 71
Cash from sales from farm... ..	592 87
Cash for old metal and barrels.....	65 18
Cash for coal, gas and supplies .....	66 92
Cash for dry goods and sewing .....	31 09
Cash from shoe shop .....	125 55
Cash from sales in cabinet shop .....	33 83
Cash from broom shop .....	9 82
Cash for books and stationery.....	13 68
Cash for old wagon.....	20 00
Cash for paints, oils and brushes.....	16 00
Cash for sundries—pigeons, brick, etc....	10 28
Total .....	\$ 63568 90
Less special appropriation for furniture, accounted for by Treas- urer.....	2000 00
Total .....	\$ 61568 90

## GROCERIES AND PROVISIONS.

Butchers' meat, 46,273 pounds .....	\$ 3480 70
Bread, crackers and breadstuffs.....	2387 27
Butter, 11,091 pounds. ....	1734 93
Sugar, 12,907 pounds .....	1213 04
Syrup, 880½ gallons.....	456 63
Chickens and turkeys, 1,001½ pounds.....	99 55
Fish, fresh and salt (halibut, \$3.75) .....	59 51
Flour, 6,034 pounds .....	194 45
Eggs, 939 dozen .....	77 22
Cheese, 969 pounds .....	112 24
Lard, 826 pounds.....	69 44
Prunes, 1,918 pounds .....	157 94
Currants, 327 pounds.....	20 43
Coffee, 2,454 pounds .....	563 32
Tea, 231½ pounds .....	125 10
Apples, 191 barrels.....	514 25
Salt, 9 barrels and 28 sacks .....	18 95
Vinegar, 343 gallons.....	73 29

Soap, 128 boxes .....	\$ 590 65
Potatoes, 227½ bushels .....	118 97
Apple butter, 796 pounds .....	72 96
Beans, 1,266 pounds .....	46 71
Dried fruits—peaches, apples and berries, 1,344½ pounds .....	115 39
Rice, 490 pounds .....	41 99
Cracked wheat and oat meal, 1,409 pounds .....	69 35
Chocolate, 4 pounds .....	1 90
Honey, 34½ pounds .....	6 62
Starch, 515 pounds .....	51 84
Hominy and corn meal, 960 pounds .....	12 10
Raisins and citron .....	16 90
Condiments, spices and flavors .....	73 40
Soda and baking powder and yeast cakes .....	48 60
Indigo, 10½ pounds .....	12 30
Dried corn, 151 pounds .....	12 18
Grapes, 1,758 pounds .....	72 94
Small fruits and berries, 58 bushels .....	136 55
Canned fruit, 9 cases .....	24 05
Oysters, 30 cans .....	9 80
Sal soda and concentrated lye .....	38 71
Vegetables .....	6 35
Pop corn .....	1 00
Toilet soap .....	3 10
Sassafras bark .....	1 55
Total .....	\$ 12944 17

## FURNITURE.

Bedsteads, 102 .....	\$ 260 52
Mattresses, 166 .....	435 20
Woolen blankets, 105 .....	441 25
Chairs, 314 .....	257 70
Hotel range .....	150 00
Purchasing furniture .....	16 00
Feathers, 214 pounds .....	128 32
School desks, 85 .....	295 25
Book cases .....	80 50
Curtain goods and fixtures .....	156 30
Gas fixtures .....	484 73
Mattress moss, 1,014 pounds .....	105 95
Ticking, 601 yards .....	93 96
Mattress twine .....	10 85
Wardrobes, material and labor .....	460 88
Making mattresses .....	40 00
Goods for quilts and sheets .....	671 64
Carpets, lining, oil cloth, binding and tacks .....	497 81

Chamber furniture .....	\$ 149 47
Tableware .....	152 91
Table linen .....	175 05
Table cutlery .....	35 95
Glassware .....	48 30
Crockery and stoneware .....	85 84
Woodenware .....	14 15
Willowware .....	12 60
Lamps, lanterns and fixtures .....	63 80
Tinware .....	93 55
Kitchenware .....	30 30
Tables .....	64 68
Crash, toweling and napkins .....	91 18
Marseilles quilts, 53 .....	95 25
Mirrors .....	17 90
Stoves, repairs, pipes and fixtures .....	78 41
Scrub and dust brushes .....	17 55
Meat cutter... ..	9 00
Wardrobe hooks, castors, and bed irons .....	23 95
Brooms, mops .....	19 50
Repairing, varnishing, and oiling furniture .....	44 11
Clocks (three) .....	10 50
Well buckets and fixtures .....	3 80
Picture frame and nails .....	3 60
Knitting cotton .....	2 75
Wringers, machines, and fixtures for laundry .....	134 46
Tools and fixtures for gas house .....	7 20
Tools for pump house .....	1 35
Bath brick and whiting .....	2 20
Scissors .....	1 30
Thermometer .....	50
<b>Total .....</b>	<b>\$ 6127 97</b>
Less special appropriation 17th General Assembly, for disbursement of which see Treasurer's report .....	2000 00
<b>Net amount paid from support fund .....</b>	<b>4127 97</b>

#### DRY GOODS AND CLOTHING.

Boots and shoes, 58 pairs .....	\$ 113 70
Shoe laces, brushes, and blacking .....	8 45
Suits of clothes, 26 .....	180 50
Coats, 34 .....	116 10
Pantaloon, 43 .....	86 10
Overalls, 2 .....	1 00
Vests, 14 .....	15 25

<b>Shirts, 28.....</b>	<b>\$ 25 95</b>
<b>Trunks and satchels, 11 .....</b>	<b>24 35</b>
<b>Hats, 72.....</b>	<b>23 77</b>
<b>Caps, 11.....</b>	<b>7 75</b>
<b>Underwear .....</b>	<b>7 65</b>
<b>Scarfs, 11.....</b>	<b>5 65</b>
<b>Combs .....</b>	<b>5 35</b>
<b>Suspenders, 11.....</b>	<b>2 57</b>
<b>Hose and socks, 74 pairs.....</b>	<b>15 40</b>
<b>Collars, 85 boxes .....</b>	<b>13 85</b>
<b>Handkerchiefs, 37 .....</b>	<b>4 00</b>
<b>Braid .....</b>	<b>2 26</b>
<b>Knitting cotton .....</b>	<b>5 30</b>
<b>Thread.....</b>	<b>23 89</b>
<b>Needles and pins.....</b>	<b>7 66</b>
<b>Yarn.....</b>	<b>13 08</b>
<b>Buttons.....</b>	<b>6 61</b>
<b>Dress goods.....</b>	<b>33 69</b>
<b>Flannel, 58½ yards.....</b>	<b>10 18</b>
<b>Muslin, 150 yards .....</b>	<b>14 83</b>
<b>Thimbles .....</b>	<b>1 76</b>
<b>Jeans, 4 yards.....</b>	<b>1 00</b>
<b>Shawls, 2 .....</b>	<b>2 50</b>
<b>Millinery, collars, cuffs, and gloves.....</b>	<b>14 49</b>
<b>Indelible ink.....</b>	<b>4 10</b>
<b>Total .....</b>	<b>\$ 798 74</b>

#### FUEL AND LIGHTS.

<b>Coal, 1,059½ tons.....</b>	<b>\$ 3647 47</b>
<b>Coal oil, 246 gallons .....</b>	<b>42 82</b>
<b>Coke, 2,850 bushels.....</b>	<b>379 38</b>
<b>Candles, 720 sets .....</b>	<b>106 10</b>
<b>Matches .....</b>	<b>10 85</b>
<b>Lime for gas house .....</b>	<b>15 60</b>
<b>Tools for gas house .....</b>	<b>4 40</b>
<b>Total .....</b>	<b>\$ 4206 62</b>

#### SALARIES AND WAGES.

<b>Salaries .....</b>	<b>\$ 13436 91</b>
<b>Wages.....</b>	<b>7863 96</b>
<b>Total .....</b>	<b>\$ 21300 87</b>

## SHOPS.

Leather and tools for shoe shop .....	\$ 436 55
Material and tools for cabinet shop.....	56 18
Machinn and material for broom shop .....	42 69
Total .....	\$ 535 42

## FARM AND GARDEN.

Wagon and carriage repairs.....	\$ 47 85
New wagon.....	80 00
Horseshoeing .....	59 75
Implements and tools.....	62 61
Repairs to implements.....	18 25
Tools and fixtures for barn.....	11 75
Whips, cushions, and blankets.....	15 05
Harness and repairs .....	43 28
Hay, 37 tons.....	71 50
Corn and oats, 1,016 bushels .....	211 88
Bran and shorts.....	13 50
Bull, and freight .....	120 20
Grass seed, 25 bushels .....	48 30
Seed potatoes and corn. ....	37 30
Garden seeds and sweet potato plants ....	65 98
Total .....	\$ 908 20

## REPAIRS AND IMPROVEMENTS.

Cleaning and repairing reservoir and wells.....	\$ 26 00
Repairs on cottage .....	12 90
Glass and putty, and glazing .....	49 47
Tin and zinc for bread box.....	10 53
Repairs of steam pump and boiler.....	149 33
Lumber and fencing .....	127 10
Material and labor on laundry and bath rooms .....	539 28
Bath tubs and fixtures .....	213 50
Liquid slating.....	14 40
Retorts, and setting .....	366 52
Steam fixtures and plumbing.....	433 58
Sewing-machine repairs.....	2 00
Lubricating oil and tallow .....	40 80
Steam boiler, sinks, and fixtures for kitchen .....	81 15
Boxing coils and work on air-ducts.....	157 40
Painting and whitewashing.....	29 44
Repairs on chimney and roof.....	29 50
Work for laundry.....	23 00
Bricking and plastering frame building .....	241 50



Pumps and repairs.....	\$ 34 78
Hose and fittings.....	48 23
Repairs on sewers.....	114 00
Machinist tools .....	22 39
Nails, screws, locks, and builders' hardware .....	311 80
New well .....	50 00
Total .....	\$ 3138 60

## MISCELLANEOUS.

Legislative Visiting Committee, hotel and livery.....	\$ 42 25
School books and supplies.....	376 88
Postage expenses.....	142 00
Printing and advertising.....	49 25
Books for library.....	153 45
Stationery .....	48 14
American Annals.....	95 00
Box rent .....	7 00
Coffin .....	13 00
Discount .....	328 12
Books and binding for office.....	24 50
Magazines, papers, and binding.....	20 75
Binding for library.....	2 50
Trustees' expenses .....	496 45
Rubber hose .....	84 56
Filling ice-house .....	105 00
Christmas candies.....	11 90
Pupils' traveling expenses.....	119 03
Fire-proof safe, and freight .....	167 80
Medicine and medical fixtures.....	154 06
Express and telegraph charges.....	5 85
Roll of honor (book)....	7 00

## RECAPITULATION.

Total receipts.....	\$ 61568 90
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## TOTAL DISBURSEMENTS:

For groceries .....	\$ 12944 17
For furniture .....	6127 97
For dry goods and clothing.....	798 74
For fuel and lights.....	4206 62
For salaries and wages.....	21300 87
For material and tools for shops .....	535 42
For farm, garden, and stock.....	908 20

For repairs and improvements.....	\$ 3138 60
For miscellaneous items .....	2446 06
Total .....	\$ 50409 65
Balance .....	\$ 11159 25

## CURRENT EXPENSE FUND.

In hand October 1, 1877.....	\$ 1791 68
Receipts during fiscal term.....	39410 37
Total .....	\$ 41202 05
Expenditures .....	31108 78
Balance October 1, 1879....	\$ 10093 27

## ORDINARY EXPENSE FUND.

In hand October 1, 1877 .....	\$ 2366 85
Receipts during fiscal term.....	20000 00
Total .....	\$ 22366 85
Expenditures .....	21300 87
Balance October 1, 1879. ....	\$ 1065 98

## OFFICERS, EMPLOYES AND SALARIES.

Moses Folsom, Superintendent, yearly.....	\$800 00 and board.
J. A. Kennedy, teacher, nine months.....	650 00 and board.
C. S. Zorbaugh, teacher, nine months .....	675 00 and house rent.
Edwin Southwick, teacher, nine months.....	500 00 and board.
James Simpson, teacher, nine months.....	500 00 and board.
M. B. Southwick, teacher, nine months.....	300 00 and board.
Margaret Pollock, teacher, nine months .....	350 00 and board.
Sue Zorbaugh, teacher, nine months.....	375 00 and house rent.
F. C. Holloway, teacher, nine months .....	450 00 and board.
Helen White, teacher, nine months .....	180 00 and board.
F. C. Booth, teacher, nine months.....	450 00 and board.
S. E. Wright, matron, yearly .....	400 00 and board.
E. Willard, assistant matron, yearly .....	300 00 and board.
Peter West, boys' supervisor, monthly .....	30 00 and board.
A. Darnell, pumping engineer, monthly .....	25 00 and board.
A. Norin, watchman, monthly . . . . .	25 00 and board.
J. Norin, heating engineer, monthly.....	40 00
Charles Hernzie, gas maker, monthly .....	30 00 and board.
W. B. Heath, shoemaker, foreman of shoe shop (mo'ly)	25 00 and board.
C. H. W. Brown, foreman of broom and carpenter shops, monthly.....	50 00
F. Gall, kitchen boy, monthly .....	10 00 and board.
R. C. Williams, barn man, monthly.....	25 00

M. S. Coe, seamstress, monthly.....	\$ 16 66 and board.
M. E. Parsons, nurse, monthly .....	16 66 and board.
Kate Harrington, pantry girl, monthly .....	15 00 and board.
Hattie Henderson, cook, monthly .....	20 00 and board.
Delia Hill, ironer, weekly .....	3 00 and board.
Hannah Devine, assistant cook, weekly .....	3 00 and board.
Nettie Olson, laundry, weekly.....	3 00 and board.
Christina Olson, laundry, weekly.....	3 00 and board.
Mary Starkey, laundry, weekly.....	3 00 and board.
Julia Hande, laundry, monthly.....	7 00 and board.
Emma Kirkendall, kitchen girl, weekly .....	2 00 and board.
Christina Christensen, hall girl, weekly.....	2 50 and board.
Nettie Lawson, hall girl, weekly .....	2 50 and board.
Anna Launing, hall girl, weekly .....	2 50 and board.
Lizzie Bathurst, dining-room girl, weekly .....	3 00 and board.
Matilda Anderson, dining-room girl, weekly.....	3 00 and board.

## SALES FROM THE SHOPS.

Shoes, 71 pairs .....	\$ 200 25
Slippers, 12 pairs .....	19 25
Boots, 14 pairs .....	74 50
Halters, 2 .....	1 50
Mending boots and shoes.....	486 15
Material from cabinet shop.....	33 83
Material from broom shop .....	9 82
Total .....	\$ 825 30

## SALES FROM FARM.

Twenty-four calves .....	\$ 163 69
Live pork, 8040 pounds.....	261 70
Stock hogs and pigs .....	38 50
One bull .....	40 00
Two cows and heifers.....	74 00
Dead cow.....	2 00
Total .....	\$ 579 89

## NOTICE TO APPLICANTS.

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THE Iowa Institution for the Deaf and Dumb is open to all proper subjects between the ages of ten and twenty-five. Applicants must be free from immorality, and from contagious and offensive diseases. They must also be of sound mind.

Such persons are entitled to receive their board and instruction, at the expense of the Institution, for a period of seven years.

The annual sessions of the school commence on the third Wednesday of September, and close on the third Wednesday of June. *Pupils should come promptly at the beginning and remain until the end of the session.*

Pupils must be furnished, *by their friends*, with sufficient clothing, and not tax the institution in this respect; but legislative provision has been made to clothe those too poor to supply themselves, at the expense of their respective counties. Each pupil should have a trunk with a good lock and key, with at least the following articles:

**MALES.**—Three pairs of pantaloons; two white and two colored shirts; two thin and two thick coats; four pairs of stockings; two vests; one fine and one coarse comb; two towels; one pair of shoes or boots; and warm drawers and undershirts for winter.

**FEMALES.**—Four dresses, two of them suitable for winter; two pairs of shoes; four pairs of stockings; and other articles in proportion, with warm underclothing for cold weather.

Every article should be marked with the name of the owner, in indelible ink; and a list of the whole should be deposited in the trunk or sent with the pupil.

The older pupils will be instructed in such trades as are taught in the Institution. The time of the pupils is considered as belonging to the Institution, and no compensation is to be expected by them or their friends.

It is respectfully suggested that the pupils' shoes can be made here as well as the old ones mended. If the pupil comes with one good pair of shoes or boots it will be sufficient. The shoe-shop will be so

managed that it will be for the interest of parents and friends to patronize it.

Applications should be addressed to Moses Folsom, Institution for Deaf and Dumb, Council Bluffs, Iowa, and should contain answers to the following questions:

1. The full name of the applicant.
  2. The year, month, and day of birth.
  3. The place where the child was born.
  4. The cause of deafness; if not born deaf, when and how the person became deaf.
  5. Whether the deafness is total or partial; if the latter, the degree of hearing.
  6. Whether any attempts have been made to remove the deafness, and with what results.
  7. Whether there is any ability to articulate or read on the lips.
  8. Whether any attempts have been made to communicate instruction.
  9. Whether there was any relationship between the parents before marriage.
  10. Whether there are any deaf and dumb relatives.
  11. The names, occupation, and residence (post-office and county) of the parents.
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### SUGGESTIONS.

Letters or packages sent to the pupils should be sent in "care of D. & D. Inst." Pupils' friends are welcome to visit them at any time, and entertainment will be furnished to a reasonable extent. This offer, however, does not apply to the opening and closing weeks of school, nor to the weeks including the holidays.

## REPORT OF THE TREASURER.

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*To HIS EXCELLENCY, JOHN H. GEAR, Governor of Iowa:*

SIR—I herewith present an account of the receipts and disbursements of the Special appropriation made by the Seventeenth General Assembly (chapter 136.)

Rebuilding main building, amount appropriated, forty thousand dollars.

## RECEIPTS AND DISBURSEMENTS.

*The State of Iowa in account with John H. Stubenrauch, Treasurer—*

## CREDIT.

DATE.	ON WHAT ACCOUNT.	AMOUNT.
1878.		
Aug. 17	By warrants on State Treasurer.....	\$ 5000 00
1879.		
April 1	By warrants on State Treasurer.....	28000 00
Oct. 1	To balance due Treasurer.....	1322 92
	Total.....	\$ 34322 92

## DEBIT.

DATE.	TO WHOM PAID, AND ON WHAT ACCOUNT.	AMOUNT.
1878.		
Oct. 12	Thos. Teale, foreman, pay-rolls and material.....	\$ 5950 00
Oct. 12	J. L. Taylor & Co., paints and oils.....	123 69
Oct. 12	Thos. Teale, foreman, sand.....	400 00
Oct. 12	Trustees, per diem and mileage.....	120 80
Oct. 18	Thos. Teale, pay-rolls and material.....	5325 00
Nov. 15	Trustees, per diem and mileage.....	79 80
1879.		
Jan. 15	Thos. Teale, foreman, pay-rolls and material.....	300 42
Jan. 15	E. R. Cassatt, president, discount on warrants.....	100 00
March 12	A. B. Ellis, carpenter.....	25 00
March 12	John L. Hambright, carpenter.....	25 00
April 3	A. B. Ellis, carpenter.....	41 34
April 3	John L. Hambright, carpenter.....	5 00
April 3	Chas. W. Williams, painting.....	27 95
April 3	Frank Veldema, laborer.....	13 50
April 3	J. H. Pierce, heating apparatus.....	1209 29
April 3	Miller & Co., hardware.....	362 21
April 3	Harle & McKune, paints and oils .....	45 30
April 3	Geo. Bebbington, lumber.....	1205 75
April 3	Council Bluffs Gas Co., material and fixtures.....	342 49
April 3	A. B. Ellis, carpenter.....	63 66
April 4	C. Straub, brick.....	23 10
April 4	Geo. Bebbington, lumber.....	2500 00
April 4	C. Straub, brick .....	478 10
April 4	Geo. Bebbington, lumber.....	1000 00
April 4	C. Straub, brick.....	574 35
April 4	I. L. Overton, lumber.....	351 32
April 4	I. L. Overton, lumber.....	1082 89
April 4	Groneweg & Schoentgen, nails.....	138 00
April 4	G. A. Hoagland, lime and cement.....	425 75
April 4	Geo. Bebbington, lumber.....	2500 00
April 4	John Epeneter, tin-roof.....	590 00

## RECEIPTS AND DISBURSEMENTS—CONTINUED.

DATE.	TO WHOM PAID, AND ON WHAT ACCOUNT.	AMOUNT.
1879.		
April 4	Haxtun Steam Heater Co., heating apparatus.....	\$ 2500 00
April 4	John Epeneter, tin roof .....	300 00
April 4	Trustees, May, June, July, September, 1878.....	458 75
April 4	Council Bluffs Gas Co., gas fittings .....	291 60
April 4	I. L. Overton, lumber .....	321 45
April 4	Geo. Bebbington, lumber.....	500 00
April 4	Geo. Bebbington, lumber.....	500 00
April 4	John Epeneter, tin roof .....	342 28
April 4	Thos. Teale, foreman, pay-roll and superintendence....	500 00
April 4	Harle & McKune, paints and glass .....	186 26
April 4	S. A. Robertson, sewer pipes .....	69 00
April 4	Groneweg & Schoentgen, nails .....	60 70
April 4	Geo. A. Hoagland, lime and hair and cement .....	200 50
April 4	Thos. Teale, labor and superintendence.....	465 00
April 4	Trustees, per diem and mileage, August, 1878.....	87 50
May 7	John Jackson, rail fixtures .....	11 50
May 8	John L. Hambright, carpenter .....	40 00
May 8	A. B. Ellis, carpenter.....	53 00
June 13	John L. Hambright, carpenter .....	30 00
June 13	A. B. Ellis, carpenter.....	40 00
June 27	John L. Hambright, carpenter .....	55 00
June 27	C. M. J. Reynolds, carpenter.....	55 00
June 27	Geo. Bebbington, lumber.....	200 00
August 16	John L. Hambright, foreman—carpenter.....	109 40
August 16	J. B. Rue, plastering .....	33 75
August 16	Harry Frost, carpenter.....	22 00
August 16	James Simpson, painting.....	77 00
August 16	Chas. Williams, painting.....	117 50
August 16	T. O. Hill, painting.....	77 00
August 16	S. P. Hannan, painting.....	60 00
August 16	C. S. Torbaugh, painting .....	73 00
August 16	C. H. W. Brown, carpenter .....	59 25
August 16	Geo. Bebbington, lumber.....	13 50
August 16	Miller & Co., hardware.....	2 35
August 16	W. W. Wallace, charcoal.....	1 75
August 16	James Nolan, lumber .....	10 50
August 16	Miller & Co., hardware.....	35 66
August 16	Harle & McKune, paints and oils.....	138 12
August 16	Council Bluffs Gas Co., trap.....	5 25
August 16	A. L. Strang, valves .....	8 75
August 16	John Epeneter, tin roof on belfry .....	46 05
August 16	Geo. Bebbington, lumber.....	105 03
August 16	John Jackson, irons for railings.....	5 75
August 16	John Kelley, sand.....	2 66
August 16	C. M. J. Reynolds, carpenter.....	13 75
August 16	C. Straub, brick.....	4 50
Sept. 16	J. L. Hambright, carpenter.....	50 00
Sept. 16	Chas. W. Williams, painting .....	45 00
Sept. 16	J. F. Sneethen, labor.....	9 00
Sept. 16	A. J. James, labor.....	9 00
Sept. 16	L. C. James, labor.....	11 62
Sept. 16	Harle & McKune, paints and oils.....	52 63
Sept. 16	John Hammer, lime and sand.....	2 00
Sept. 16	John L. Hambright, carpenter .....	22 50
Sept. 16	Chas. W. Williams, painting .....	22 50



RECEIPTS AND DISBURSEMENTS—CONTINUED.

DATE.	TO WHOM PAID AND ON WHAT ACCOUNT.	AMOUNT.
1879.		
Sept. 16	J. B. Rue, mason.....	\$ 15 00
Sept. 16	Trustees, per diem and mileage .....	93 30
Sept. 16	W. Floyd, painter.....	31 50
Sept. 16	R. N. Fox, labor on fire-escape.....	28 00
Sept. 16	S. D. & S. J. Hopkins, material for fire-escape.....	15 36
Sept. 16	Jas. Varian, labor.....	8 09
Sept. 16	J. H. Stubenrauch, Apr. 2, Int. paid 1st Ntl. B., C. Bluffs.	62 50
Sept. 16	J. H. Stubenrauch, April 1, Int. paid S. A. Merrill, Prest.	45 15
Sept. 16	Thos. Teale, foreman, balance on pay rolls .....	80 00
	Total .....	\$ 34322 92
Oct. 1	To balance due Treasurer.....	\$ 1322 92

FURNITURE FUND.

*Amount appropriated, two thousand dollars.*

DATE.	TO WHOM PAID, AND ON WHAT ACCOUNT.	DEBIT.	CREDIT.
1878.			
Sept. 9	By warrant on State Treasurer.....		\$ 2000 00
Oct. 12	To Fred Teale, furniture purchased .....	\$ 846 75	
Oct. 12	To M. Folsom, freights paid .....	100 00	
Oct. 12	To Citizent' Nat. B'k, discount on warrant..	40 00	
1879.			
March 12	To W. L. Whitney, Jr., glassware.....	15 18	
April 4	To Jno. L. Hambright, carpenter .....	74 00	
May 6	To Smith & Crittenden, dry goods for bed'ng	126 48	
May 6	To Bryant & Dowling, carpet.....	31 05	
June 13	To Sterling School Furniture Co., desks ....	259 41	
June 13	To M. Folsom, freight.....	35 84	
August 16	To W. H. Goff, fencing .....	6 50	
Sept. 30	To S. S. Kellar, furniture .....	354 80	
	Balance on hand.....	109 99	
	Total.....	\$ 2000 00	\$ 2000 00
Oct. 1	By cash in hands of Treasurer.....		109 99

JOHN H. STUBENRAUCH,  
*Treasurer.*



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## APPENDIX.

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## APPENDIX.

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### THE EARLY HOME TRAINING OF DEAF-MUTE CHILDREN.\*

IN view of the annoyances and the injustice to which the deaf-mute child is exposed, and against which the most faithful guardianship and caution cannot always protect him, he should early be taught to be patient and unassuming, and accustomed "rather to suffer wrong than to do it." "Even in the deaf-mute child lies the capacity to form an idea of God, the Lord of heaven. It needs only promptings from without to awaken this idea. The religious emotion is first enkindled by the religious sentiments of the parents. Out of consideration for this deaf-mute child they should give their religious feelings visible expression. If he sees that his father or mother never sit down to eat without first folding their hands and raising their eyes heavenward; if he sees that evening and morning they look reverently up to heaven, and in all circumstances exhibit a sacred awe of One above, who is invisible; that they pray to Him, give thanks to Him, fear and love and trust Him, he will ask to take a part in all this himself, and so will be awakened in him involuntarily a holy awe of Him who sees us although we see Him not; who sends thunder and lightning, storm and rain; who regards the good graciously, but the bad, with disapproval; who threatens and will punish these, but receives those to Himself at their death." But all this, and in general the whole matter of the education of the deaf-mute child, must be pursued earnestly, and in the love of Him who said "Suffer little children to come unto Me." In reference to this Yayer says: "Only treat the deaf-mute child affectionately, and you will find that with him, too, love begets love. This should especially be the case in the home circle. Kind treatment on the part of his friends is the necessary condition of his instruction in morality and religion. Gratitude to his parents and other benefactors, and love for his brothers and sisters and youthful companions, must, with the deaf-mute child as with others, prepare the way for gratitude to God and charity to all."

How such love may affect the deaf-mute and be shown toward him, has been already pointed out in various ways. This may be mentioned in addition: It is undeniable that the deaf-mute child, in consequence of his infirmity, loses much which might contribute to his enjoyment of life; but if

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love seeks to compensate him for this it can find a way. Where the deaf-mute child is not repulsed, but rather admitted to intimacy, there indeed his heart swells with delight. Therefore, he should not be allowed to feel his condition when it can be avoided; he should never have reason to suppose that his brothers and sisters are preferred before him; and both in his own family and in the place where he lives, he should receive, as far as possible, kind, forbearing treatment.

He should, also, often be unexpectedly delighted by little gifts, such as toys not easily broken, a picture book, or a slate; but with the playthings should always be furnished, if it is at all possible, a playfellow. Especially should hearing children be persuaded to admit the deaf-mute child to their play, and help him on all occasions to be pleasant to others. The deaf-mute child should be taken out to walk, and by leading him to see and observe nature his mind should be opened to notice the fulness of motion and beauty in it—a rich source of instruction and pleasure. He should be taken to every place where something useful is to be seen, from the country to the city, to the weekly and yearly fairs, to the different trades and other employments, to the shops and booths, to church, etc.

Although what has been said refers principally to the duties of the parents and the home training, yet it must not be thought that the co-operation of others is to be excluded. Since, especially in modern times, schools for little children are to be found everywhere, even in the country and in villages, the opportunity to send the deaf-mute child to them should not be neglected, especially by those parents whose business takes them from home the greater part of the day. But of especial importance is the relation into which the parents of deaf-mute children should enter with their pastors and teachers. From the moment when a doubt occurs to them with regard to the hearing or the power of speech of their child, careful and conscientious parents will turn where, especially in the country, they are accustomed to turn in all important matters.

One of the most important, certainly, is this which is here treated of, and they should confer with the pastor and teacher, who are generally the only ones who possess an understanding of the case. Parents who love their children will not hesitate to tell the minister and teacher of what agitates their hearts, to obtain competent advice from them and to act upon it. All the observations of the child, all the experiments and efforts with him which have been spoken of, should, we think, take place under their advice and control. They will readily answer the questions of the parents, and assist them in their often difficult duty. It will not be enough, where such a child is concerned, that the teacher should receive information of him, or be consulted once about him. He should himself, the oftener the better, look up the child at home, ascertain the proper treatment of the case both physically and intellectually, give the parents the advice they require, and, if necessary, speak to them conscientiously of the sad consequences of neglecting their child or treating him carelessly, and confer on the subject with the local school authorities. When the child comes to the usual school age he has a

still greater claim to the attention of the teacher and pastor, and they should share this duty with the parents. All deaf-mute children, where health will permit it, should attend school. Here pastor and teacher come under very important obligations; it is their duty, above all, to see that this is done, and that it is not done in vain. If they have already exerted an influence upon the educational training of the deaf-mute child at home, the work of the school will not be too difficult or without results.

The duty of the teacher to the deaf-mute in the common schools falls outside the limits of this paper, which ends where the school age begins. The following hints, however, are given. At first the teacher should only attempt to teach mechanical writing, drawing, and such other simple exercises as will naturally occur to his mind. So far as time and circumstances permit the teacher should use the sign-language as it has been employed at home, and should bring to the child's notice objects near and remote; for which purpose pictures instead of objects may be used. In the next place, signs should be so joined to written language that the written word may be translated by signs, and inversely the sign be given and he gradually be put into possession of a stock of words and ideas of written language. Then the idea of numbers will be necessary. Figures may be put together, which, progressing from the figures of the hand, may be extended by various means, such as little sticks, beans, buttons, etc., and especially by the Russian calculating machine.

Since, however, the technical peculiarity, what might be called the highest aim of deaf-mute instruction, depends upon the communication of spoken language, many teachers will wish to solve this problem for the children sent to them. Here, however, it must be taken into consideration that for this thorough preparation and tested skill are necessary, without which no important result can be reached, but much harm may be done, and latter instruction in an institution may be made more difficult. Teachers of deaf-mutes are generally agreed that the co-operation of the common schools in their education should not overstep the bounds of an effective preparation for the entrance into special schools for deaf-mute instruction; and this preparation, with rare exceptions, should not include instruction in articulation. On the contrary, it is now the duty of the ministers and teachers to show the children to whom they have devoted themselves with self-sacrificing toil, the greater favor of obtaining their admittance at the proper time into a deaf-mute institution. Good and sensible parents will consider it a sacred duty to use the surest means for the accomplishment of the work they have undertaken; they will readily lend a helping hand to commit their child to the care of an institution when it comes to the proper age. Where it is possible this should not be later than eight or nine years of age.

If, however, any parents should be deterred by prejudices and difficulties, then all the local authorities should co-operate to overcome them. It is said that very often the poverty of the parents and the community hinders their providing for the deaf-mute children. But in our country so much is done by the State to assist cases of poverty, that if the case is only taken in hand

earnestly, if the right means are only used, no insuperable difficulties will be found. If, on the other hand, wealthy parents are prevented, by avarice and selfishness, from doing anything for their child, it will not be difficult to show them the falsity of their ideas and the responsibility with which they charge their conscience before God and man. If some would excuse themselves by saying that they must provide for their other children, we would answer that the deaf-mute child causes expense even at home, and that his brothers and sisters will owe them little thanks if later in life his incapacity to care for himself proves burdensome to them.

So, also, the community makes a great mistake when, from motives of economy, it refuses to educate a poor deaf-mute child, who when grown, is all the greater burden upon its hands. If he had been educated in school and in some trade he could support himself.

A silly love and weakness on the part of the parents will often lead them to refuse to give the child into strange hands. But is it not possible to convince them that such love, so far as it withholds the best gifts from the child, is only egotistical and false? It is also a false shame that induces many parents to try to hide the fact that they have such a child in their family. Will it not afterward be a real disgrace and shame to them, when it can no longer be concealed, that they, through their own fault, have allowed a grown-up relative to remain among them in the condition of a brute? Many neglect it, also, from indifference and a want of education in themselves. If, then, remonstrance and admonition are of no avail, if they are not terrified by the thought of seeing their children deprived of the benefits of school and church, of the Word and sacraments, of confirmation and the Holy Communion, the means are yet at command by severity and rigor, viz: by a firm carrying out of the existing laws of morals and school police, to make an effectual impression upon parents who have no conscience.

When, after all, the relatives do not cease to expect the opening of the ears and the gaining of speech by the help of nature or the physician, and so run the risk of losing the only real, practical help, then the physician should certainly not be called upon in vain to put an end to such a delusion, and to induce them to attempt the improvement of their child in school and a deaf-mute institution. In all cases of resistance and delay the best effect will be produced if the parent can be made to see what the deaf and dumb are capable of doing when educated, by inducing them to visit deaf-mute institutions. It is true, after all, that human stubbornness and obstinacy are conquered by force. But it seems to us that if the means at command are only rightly and properly used, in by far the most cases such children may be saved.

A deaf-mute cannot be expected to gain the mastery of a language so complicated as ours by the efforts of the teacher alone. The teacher may, indeed, give him a knowledge of any branch of study, which, like mathematics, proceeds by rule and method; but, let him work ever so assiduously, he never can implant in the undeveloped intellect of a deaf mute that fine perception, that delicate sense of propriety, which would enable him always



to put a noun, a verb, and their modifiers, in the right place. Neither is it possible for the instructor to explain the subtle differences of meaning between one and the same word used in different connections. These various shades of meaning, as well as the numberless synonyms which our mother-tongue has inherited from several languages, are to be understood only after a long continued course of reading. To a deaf-mute there is no difference between a wood house and a wooden house; both mean the same to him. He is apt to take words too literally; as, for instance, when we say this lecture drew a full house, or that politician is running for Congress, he will believe that the lecture actually drew the house along in some way or other, and that the politician is footing it to the national capitol. Such is his ignorance of the meaning which a word assumes in different positions that he will invert the meaning of compound words without being aware of the difference in the two expressions. "Prize-fight" is a case in point, for I have seen it spelled "fight-prize."

For the same reason a joke is lost upon him, he being unable to see the flash of wit in a combination of words having a double meaning. It seems to me, the only way to remedy these deficiencies is that of constant and careful reading; for, by meeting a word again and again in different positions, he will gain a clearer idea of its meaning. There are not a few deaf-mutes to-day who have educated themselves in this way, without ever having used a dictionary. It is a wonder that teachers, knowing as they must the importance of reading as an aid in the education of the deaf and dumb, have not taken a more active interest in providing reading for their pupils outside of the narrow precincts of the school-room; for many are content to do their daily routine of duties, and when these duties are ended for the time being, they are too easily satisfied with having done their part; forgetting that the English language can never be taught, but must be learned.

The deaf-mute expresses himself oftener in signs than in words; and, as a consequence, he is liable to lose whatever command of language he has. The teacher cannot re-stock the mind of the pupil with words, phrases and idioms; that he must leave to constant practice in reading.

More care should be taken in the selection of books for the library than is generally done in institutions for the deaf and dumb; the quality and merit of the books themselves being now commonly considered rather than the tastes or wishes of the pupils.

I should think such works as those of Trowbridge, Aldrich, and Jacob Abbott, would do more toward creating a thirst for knowledge than those of Scott, Dickens, Irving, Thackeray, and George Eliot, delightful as these are to older people.

"Reading maketh a full man," says Bacon, and deaf-mutes need to read much to be full men.

## HOME EDUCATION FOR THE DEAF AND DUMB.\*

Education, to be complete, must begin and end at home. The foundation must be laid in the plastic mold of infancy; in thoughts, principles and habits, with which the child opens upon life; and over the structure built up by many hands, must be thrown, for its final completeness, the grace and refining influences of home. Man is so constituted that the influences of home are stronger than all others, and his destiny, so far as it is not directly controlled by himself and by his Creator, is marked out by his home. In that implicit faith which, in the arrangement of Providence, the child places in its parent, is a wonderful power to shape and determine its character. Here, unnoticed by most, is the silent bedding and nurture of those habits of morality, habits of intellect, and habits of conduct, which germinate, grow and bear fruit in the future development of life. Education is not simply the teaching of the schools; it is the silent teaching of example in the intimate and trusting communion of life; it is a word spoken in season; it is hope for the discouraged, and aid to the weak; and over all and above all, it is the powerful stimulus of love and virtue, working in their outward manifestation the development of the spirit of man. As the plant whose shoots just spring out of the ground may be made, by care, to assume a shape of symmetry and grace into which it will grow, so, under the same general law, the character will be shaped and established in the circumstances which affect it. And also, as the gnarled and unthrifty stock indicates that its early life was bruised and trodden down by neglect, so does a dishonored life testify against the home in which it was reared.

We have entitled our subject, *Home Education for the Deaf and Dumb*. Our design will be to show in what manner parents may commence the intellectual training of their children, before they are of suitable age to be sent to any of the institutions for the deaf and dumb now in existence; to offer some hints and suggestions in respect to the best means of unfolding and cultivating their moral character, and to make such remarks as may occur, in respect to the proper method of guarding against practices growing into habits, which are overlooked in them in consequence of their peculiar infirmity. Much that we shall have to say would be needless, were cases of deafness so common that a stock of experience might be cherished up and communicated from family to family; but so rare are the cases, that the practical knowledge and skill acquired in the education or rearing of a deaf-mute dies out in the family and neighborhood before a like case occurs to revive and establish the new ideas they had acquired. We believe that parents of deaf and dumb children are able to do much more for them than the most sanguine imagine, and with an effort, too, so small, that few who have the good of their children at all at heart will be unwilling to undertake it.

The first and obvious want of every deaf and dumb person is a vehicle of

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\* By J. A. Ayers, in the *American Annals of the Deaf and Dumb*.

communication. Knowledge is not innate in the mind. Thought does not grow and ripen there as the fruit on the tree, vegetating and coming to maturity by material law. Knowledge must be communicated; thought must be mingled with thought, that it may be in any way better than dreams; the mind must be stimulated by curiosity with the hope of some intelligent and rational satisfaction of its inquiry. The parent, then, who would in any way and to any desirable extent, profit his child and raise him above a simple animal existence, must seek for him a language, and such a language as he cannot devise for himself. The natural language of signs, uncultivated and intuitive, is but a single advance from the irrational call of brute life. It is true, even this small ability of communication is valuable, if no greater can be secured; but every parent, with the smallest share of leisure to devote to his children—and no parent has a right to be without this—can command a better language. Any person of ordinary intelligence and skill can learn the finger alphabet of the deaf and dumb, by devoting to it one or two hours' study. When once acquired, it is in itself a perfect language. With it he can converse upon all subjects upon which men can speak. He can use it in the house and by the way, in his work and at leisure. It is, in brief, only talking by spelling words instead of pronouncing them, and is as rapid a method, to say the least, as oral spelling. This, it is true, is not equal to speech, but it is a great advance upon no language, or upon the rude, ill-defined and indefinite language of natural signs. Let the parent, then, who would educate his deaf and dumb child, and throw about its opening infancy the intelligent instruction, the fond endearments and the sacred influences of home, devote a short time to the acquisition of a language which will cheer and comfort its solitary hours. Let the household all learn it, and then the young immortal, started so roughly along his journey, will find himself no longer alone in the midst of company, but mingling with it, in the enjoyment and social intercourse of life.

But no one will suppose, because a parent, by the labor of a few hours, has acquired a language addressed to the eye, that therefore he is ready to enter at once into pleasant and easy intercourse with one whose life up to this time has been an intellectual waste. No child is born to the use of language any more than it is born to a familiar acquaintance with the systems of philosophy. The acquisition of language is to every child a slow, difficult and labored undertaking. The beginnings are always small, and patience has to wait long before it is permitted to see any considerable fruit. But the parent, with this language, is prepared to teach it to his child, and to make it a medium for the communication of thought, just as he would teach and use it by speech to his more favored offspring. The progress will be slower and the results farther off, yet they will be none the less sure. Nor does it matter that the parent may be at first slow and unskillful in the use of this new language. His ability to use it will, at all events, be in advance of that of the child whom he instructs, and practice will soon make that which seems at first awkward and difficult, to become both graceful and easy. Like the

exercise of any other mechanical skill, practice will perfect in execution what knowledge devises.

But we know that to many persons, well informed upon other matters, the whole subject of the instruction of the deaf and dumb is a mystery, and above all, the commencement, the earliest efforts to enlighten the mind so strangely enclouded, is a work of peculiar perplexity and confusion. We remember the time when our own condition was much the same, and when our faith, unenlightened by information or experience, was slow to confide in the accuracy, rapidity or value of a language which was not speech. We will endeavor to give in detail and with a plainness that all can apprehend, the course necessary to be pursued by a parent who would thus bring his deaf and dumb child into the communion of his home and enable him to possess, so far as possible, all its advantages and enjoyments.

All parents understand the language of natural signs. No one ever misapprehends the nod of encouragement or affirmation, the approving smile, or the stern frown of disapprobation and rebuke. They are the evident manifestations of the spirit in the outward man which all are born to appreciate. This language of signs—and we shall not be understood to speak here of the systematized language of signs used in our asylums for the deaf and dumb, or as they are called by the French, signs of reduction—is the foundation of all language. It is just as necessary to the child who hears, as to the child who is deaf. It is the first vehicle of thought, the first means of intellectual or soul communion. Imperfect and feeble as it is, it is yet perfect in itself. But its range is limited, its capacity small, and its use but for a brief period. Upon this stock is engrafted, in the case of the child who can hear, language or speech. He grows into it by use. Signs which he understands are accompanied by language which they explain, and in a short time he is able to pass from his feeble and narrow modes of expression, to the more full and convenient forms of speech. Yet the first lessons in language, provided by nature, are the same for the deaf and dumb child; and the child who enjoys the faculty of hearing. Each understands and appreciates signs and expression; they rejoice in the smile, and fear the frown, alike. Only in one thing, up to the commencement of speech, does the deaf and dumb child feel its disadvantage. In emphasis and intonation of the voice, it loses a part of that instruction which is peculiar to infancy. Yet these are but duplicates of the expression of the countenance, and care and attention on the part of the parent are able almost wholly to counterbalance the loss. But when we come to that period when language properly begins to be used, the deaf and dumb child falls at once far and sadly behind his companion. The language of infancy is not the language of childhood or manhood. Consequently he stands still while the other passes onward into a new world. It is at this point that the deaf and dumb child is commonly left, until he is of age to be sent to an institution for systematic instruction. It is here that we propose to take him up and show parents and all interested how, with a little care, they may unfold to him the mystery of speech at home, slowly it

is true, and by feeble steps at first, yet with results as sure and as regular as those seen in other children.

The first step which the parent should take toward commencing the education of his deaf and dumb child, is, to make himself acquainted with the manual alphabet, by which words are spelled upon the hand. It is, in brief, words addressed to the eye instead of the ear. He can become acquainted with this alphabet either by studying the printed sheet which shows the form and position of the hand for the several letters, or by personal instruction from some one acquainted with its use. The latter method, if convenient, is to be preferred, inasmuch as one learning the alphabet merely from a printed impression, is apt to form a part of the letters in a stiff and awkward manner. Having taken this, his first and only necessary lesson, he teaches it to his child. He shows it how to form on its little hand the first letter of the alphabet; he does not speak it, he does not write it, but he simply teaches the child to place its hand in the proper position and it represents, and is to his mind, the letter *a*, with an idea just as clear, just as intelligent and just as well defined, as though he had heard it spoken or seen it written down. In like manner he proceeds through the alphabet, showing the child the position of the hand for the letters, and by repetition enabling him to remember them. When the child has committed them to memory, he has taken his first step in absolute knowledge. He has learned something which signifies nothing in itself and yet is to be the interpreter of all knowledge. He has commenced with a new language and is prepared to begin its use. And although he may not commence as early as though he possessed his perfect faculties, inasmuch as the way in which he is to walk is more rugged and arduous, yet he is not long delayed. As early as a hearing child is ready to undertake any course of systematic instruction, the deaf and dumb child is prepared to begin his task, not in the way of formal lessons, but just as his little companions have already learned to speak. The mother, with her child upon her knee, teaches it to lisp after her its first words of speech, not by systematic instruction, but by a moment at a time, and by every little means she can devise to awaken its curiosity and stimulate its effort. In precisely the same manner may the deaf and dumb child be taught. The mother, holding up before its sight a cup, spells the three letters which form the word and the little fingers follow slowly and uncertainly in their first effort. But now it has mastered the achievement, and as it runs about in its play, it stops to spell over on its fingers the mysterious word or runs back to its mother for the smile of approbation at the display of its accomplishment. Every word learned is a lever to work upon the future. Like the processes of geometrical progression, knowledge multiplies itself. In a very brief space indeed, and at an early age, the child properly cared for and instructed begins to seek knowledge of itself, and its little vocabulary, swelling by degrees, will soon embrace the names of all familiar objects in its vicinity. It commences talking in words only, at first, as all other children do. At the age of three years and even younger, the child may begin thus its study of language. We have seen such instances and witnessed,

with no little curiosity and pleasure, the same interest and desire to repeat to itself and exhibit to others its little stock of knowledge, which we witness in children in their first efforts at speech, and in their thousand repetitions of words and sentences, unimportant in themselves, to which their minds continually recur and about which they linger, as it were by an instinctive effort of memory.

In the natural order of things, the deaf and dumb child learns the names of things and persons first, and many who see their way clear to this point, will be apt to falter here and think that this surely is the extent of his progress at home. On the contrary, he is but at the threshold and more ready and able to advance than he was to commence. Supposing a mother to repeat to her deaf and dumb child, *shut the door*, if he knows the word *door*, he will guess the rest, and having guessed right, he will know it in future. If she says to him, when detected in some wrong-doing, *you are naughty*, he will understand it by intuition. Children never learn language by beginning with that which is difficult first. The progress is ever from that which is easy to that which is arduous, and in this way the deaf and dumb child may proceed from simple words to the understanding of all common language, as steadily and as surely as the child who hears. The two processes are perfectly, and step by step, analogous. But the progress of the deaf and dumb child must be slower, because his method of communication is slower. The great secret of success is practice. Teach the child to talk at all times. Talk to him and talk with him. Let all the household do the same. It is not by lessons; it is not by systematic instruction, that any child learns language well. It is by conversation, here a little and there a little, as his necessities, his inclinations, or his circumstances prompt. And there is this great advantage in thus teaching a deaf and dumb child at home; the language which he acquires is his mother tongue; he thinks in it and he converses in it; whereas, the language used at all institutions for the deaf and dumb is the systematic language of signs; and although this is a beautiful language and, where understood, the language which the deaf and dumb will not fail to use to a certain extent, yet being necessarily an unwritten language, and far from copious, it should always occupy a place secondary in importance. If, therefore, the deaf and dumb child learns to use written language first, it will always be to him more natural, more peculiarly his own, than if he learned it as a translation from signs.

Books, with pictorial representations of the text, will be an important aid in the early efforts to instruct the deaf and dumb child at home. They will instruct all the better, because they amuse, and to a child toiling after language under circumstances so perplexing and difficult, it is peculiarly important that no reasonable and proper incitement to curiosity be wanting. Having thus made the deaf and dumb child to speak, having made him acquainted with language as it exists and is used about him, the way is prepared to teach him as you teach any child. Any one familiar with the manual alphabet may take him as a scholar. He can be provided with a teacher at any time at a few hours' notice, and the process and appliances of instruc-



tion will be the same with him as with the child who hears. If the lesson is in geography the questions are asked, the information communicated, and the illustrations made as in oral teaching. There is no difference, only that while the voice is silent the fingers speak, yet with the same words, the same significance, and the same results.

But the education of the soul of the child and the habit of its spirit, must move on harmoniously with its intellectual progress. Docility, kindness, diligence, self-restraint, all proper obedience, trust, and love, must be the daily instructions of home. There can be no greater unkindness to a child, compelled by his situation to bear up against a peculiar misfortune through life, than to unnerve and unfit him for the struggle by inconsiderate and unreasonable indulgence in the outset. Steady and judicious government is as necessary for the deaf and dumb child as for any other. The peculiar tenderness with which one laboring under so great a calamity is commonly regarded at home, is not unfrequently allowed to rule out, in his favor, that firm and unfailing discipline which is practiced toward the other members of the family. Yet such indulgence only makes the virtuous life of the child afterward a harder struggle against early habit. Many suppose that the proper and efficient government of a deaf and dumb child is peculiarly difficult, and until there be some rational channel of communication opened, it doubtless is. Restraint, force, or punishment, without any reason given, or without an understanding of its justice and design, is perhaps worse than indulgence. It certainly is no government. Until such time, then, as the parent can converse intelligibly with his child, it will need all his skill and ingenuity so to train him up, that he shall not feel abused and oppressed, while at the same time, he shall be taught, fully, filial obedience and subjection. When, however, this point in instruction is reached, and the mind of the child is no longer in darkness in respect to the reason of things done, no child is more easily governed; indeed we may say, no child is governed so easily; for inasmuch as not a little of the corrupting influence of unworthy associates is impotent in effect upon one unable to hear, his mind turns with a purer affection and a more confiding obedience toward the parent whose love is the solace of his life.

Not a little solicitude is felt by many parents in respect to the spiritual condition of their children previous to their receiving an education. They see, in their outward lives, painful evidence of jar and disorder in the inner being. Whatever else their privation may have shut out, it, at least, has not shut out the seed of corruption, and they feel, often with painful intensity the necessity of implanting the germs of virtue, of morality, and of religion. To such parents we can offer no encouragement except in the vigorous prosecution of the intellectual course we have recommended. It is generally conceded among those conversant with the instruction of the deaf and dumb, that with persons born deaf, there is no proper idea of God or of the soul, until the commencement of systematic instruction; such instruction as is given in schools for the deaf mute. But let the parent teach his child language, even in a rude and very imperfect way, and he may then teach him

all things, even as he teaches his other children, by conversation, by direct instruction, and by books.

It may be asked, perhaps, why the parent should not learn the cultivated language of signs and thus be able to communicate with his deaf and dumb child. There are two reasons against it, either one of which would be conclusive. To learn the language of signs, requires a practice and effort equal to that necessary to learn a foreign spoken language; besides, it cannot be learned from books; it must, in all cases, be taught by the living teacher. Of course its acquisition would be an impossibility in most families. In the next place, signs, however highly cultivated, are only a secondary language. They cannot be written. They are not an end or aim in deaf-mute instruction, but only a help, an aid in the acquisition of a more perfect channel of thought. But the little child, beginning to learn words at home and almost in his infancy, can dispense with these. He has many years before him and can afford to come into language in the natural way. It will be said by some, perhaps, that we disparage the language of signs, but we think not. We believe that we appreciate signs; that we are attached to their use we know. They are invaluable to the deaf and dumb. They are the charm of conversation, the gist of a story, the essence of pleasantry and mirth; they are beautiful in narration and fervent in prayer; and especially to a large class of deaf-mutes, whose intellects, being slow, are never able fully to appreciate written language, are they a treasure beyond price. Were we deprived of hearing and speech we would not part with them for the wealth of the world. Yet their very beauty and facility of acquisition may dispose the mind to linger about them and be satisfied with them, when the whole faculties should be bent to the acquisition of a language in which the intellect may expand to the full extent of its capacity.

We cannot, then, avoid the conclusion that the deaf and dumb child, commencing his education at home, possesses these two great advantages; first, that he comes naturally into the possession of written language. It is his first language. It is not a translation from signs. He learns it, as we all do, by use, proceeding from step to step in the ordinary progress of childhood. Words possess a significance to him which only a long course of experience can give, where language is learned through signs. And in the second place, childhood is not to him a blank period. To the child who commences learning at the age of ten or twelve years, there is a portion of his life which has passed into oblivion. He begins to live intellectually at a disparity with his body. His thoughts and feelings, his inquiries and errors are such as we look for in a child of a few years, and contrast strangely with the maturity of his physical frame. Something from his past history is gone; an experience he cannot recall. From infancy to maturity there is only a confused remembrance, and he feels, often painfully, that a part of his life is wanting to him.

If it be asked, why may not a parent, then, educate his deaf and dumb child at home, without the aid of a public institution, we reply that he may; but as few parents have either the time or the ability to perfect the educa-



tion of their hearing children at home, still fewer will be found who can successfully carry on and complete the education of a deaf and dumb child. It is not of this we have spoken, but of the ability and obligation resting on all parents to teach their children who are deprived of hearing to use the language of daily life in their early years, and under the genial and fostering care of home.

To those who may have children destitute of the sense of hearing, we would earnestly recommend the attempt thus to teach them. Even if they fail in part, or if the progress be slow, it will yet avail much. Every advance secured will make the succeeding efforts easier, and even a very small acquaintance with language, obtained in infancy, will aid greatly in the after mental development. When placed in a public institution for systematic training and instruction, it will be a vantage ground from which to start, and other circumstances being equal, their future progress will more than maintain their relative superiority.

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#### THE METHODS OF DEAF-MUTE EDUCATION.\*

The methods employed in teaching mutes are especial only as they relate to the teaching and use of language. Mental discipline and the acquisition of knowledge, so largely the objects of general education, are secured by mutes by methods the same as those pursued in ordinary schools. The prominent use of object lessons, so frequently remarked by visitors, is an apparent characteristic resulting from the use of pantomime which, as far as it goes, represents ideas far more vividly than any mere word description. Mental discipline is gained indirectly by the exercise of the faculties upon the successive branches of study which constitute the course, and which extend from the primer to the most advanced studies of the high school, the study of language having a prominent place throughout.

Disciplined mental power can be readily developed by the training of a series of years. Elementary knowledge upon the various subjects embraced in the course of study can also be readily imparted, if the instructor is a skillful user of pantomime. But, this done, if no more has been done, the graduate, diploma in hand, is worth less to himself and to the community than many a six-year-old urchin first crossing the threshold of the primary school. The ability to read and write, and perhaps to speak the English language, while by no means a measure of the discipline and learning of the mute, is yet the real measure of his value in human affairs.

The different opinions held by the educators of deaf mutes, and all the discussions, more or less heated, of the last fifty years, have centered around the question, how best to teach language in its spoken or written forms.

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\*By Supt. G. O. Fay, in the 46th Annual Report of the Ohio Institution.

These are the living questions of to-day. They are embraced in the following category :

- 1st. Why not use and require of the pupil oral speech ?
- 2d. Why not use and require spelled or written speech ?
- 3d. Why not use and require syllabic or word signs made in the order of the English sentence ?
- 4th. Why not use pantomime ?

The discussion of these questions will develop the principles and methods which underlie the subject of deaf-mute education, and which in their logical results determine the details of the daily school-room routine.

- 1st. Why not use and require of the pupil oral speech.

In a hearing school, the very first morning, there gathers around the teacher a group of children who, every one of them, can hardly restrain the disposition to talk and whisper long enough for him, in a few well chosen words, to draw his first lines of order. Why not pursue the same way, only more patiently, with a class of keen-eyed mutes ? The fact is, the teacher of the hearing school, his first morning, can use language with a certainty of being understood, and will listen to statements expressed with a correctness which the best talkers and lip-readers among mutes have never equalled in any school upon their graduation day. By experiment the teacher of the mute class will ascertain that one or two of the twenty can hear words shouted near to one or both ears. He may also discover one or two more, who did not lose their hearing until after they had learned to talk, and from these, by pronouncing familiar words composed largely of labial sounds, slowly and with frequent repetitions; he may occasionally secure a response, assuring him that he is understood. The teacher is glad to find two or three even who escape the designation of "mute." But how with the sixteen or seventeen remaining who can neither understand the teacher nor talk to him, but who yet constitute the body of the class and give it its character ? They are children who, for ten years, the most plastic years of life, have been surrounded by talkers whose social interest in them has been chiefly expended in efforts to induce them to talk, or at least to understand what is said to them. Baffled and disappointed in this, the parents have brought their child, always the pet of the household, to the institution to be educated. Withdrawn from his home life, the social influence of which has failed to draw him from his profound isolation, he is now added to a community of hundreds similarly afflicted with deafness. Fond parents, who have perhaps expended hundreds of dollars in efforts to restore the hearing of their child—efforts only to be abandoned as abortive—still cling to the possibility that their particular child may be able to acquire the art of articulation and lip-reading, and so be restored to general society. Poor mute child ! What hast thou not suffered at the surgeon's hand, guided by the sympathy, it may be the pride, of the parental heart ! What art thou yet to suffer in laborious efforts to get what, in a large majority of cases, can never be obtained ! Theorizers, and, it may be, teachers, have told the parent that all is easy, and that the good day is coming, is even now dawning, when the name

"mute" will cease to be applied to any intelligent youth, except as a stigma. The answer to these fond parental expectations, and these positive professional claims, is found in the experience of the best European schools, where, after two generations of experiment, it is admitted that but a small fraction of the pupils taught are ever able to hold easy oral conversation with their fellow men. The intelligent gentleman or lady, as the case may be, whom somebody has met somewhere, who understood all that was said in private and in public, and who conversed readily upon all subjects without exciting the suspicion of his deafness, is a mythical personage, finding a place naturally in the poetical department of the literature of deaf-mute education. With the greater number of deaf mutes, as they exist in our communities, efforts to carry forward their education by oral speech will fail to give speech to any useful extent, and, which is a very serious evil, will also consume the time needed to acquire the elements of a good English education by an easier way. It is probable that with a large majority of deaf mutes the improved method, as it is called, if applied and persisted in, will prove to be merely a mangling process. Pains should be taken to restore to the use of oral speech those who are partially deaf, and those who retain something of the speech which they had acquired before they became deaf. A few other mutes, congenitally so, will also be discovered possessing sufficient ambition, adaptation, and skill to undertake the difficult art. Excepting the partially deaf, who properly are excluded from the category of deaf mutes, these latter should pursue the art, at institutions at least, as a separate branch of study. The results of this study, growing from year to year, should be utilized by the conscientious teacher in the exercises of the school-room, where all who can talk or read lips with any facility or satisfaction should be encouraged and required to do so to the extent of their proficiency. How large a fraction of the school these will constitute, the experience and increasing skill of the future must determine. At present, in our state institutions, it comprises a little above one-tenth of the whole number.

2d. Why not use the required written or spelled speech?

Granting that oral speech, except with a small fraction, is impracticable, and that for the mass of deaf mutes some other method of approach must be pursued, may not the teacher maintain the second line proposed, namely, that of using himself, and of requiring the pupil to use written speech or language spelled with the manual-alphabet?

Excepting the semi-mutes described above, at the outset of the course, at least, this is impossible. The teacher has yet to give the pupil the first forms of words, and to do it most effectively, numberless illustrations and associated ideas should be introduced. Pictures can be used, and they are relied upon, as far as available, but their scope and adaptation are very limited. The necessities of the situation, in all schools, articulating schools included, force the teacher to avail himself for a time of the mute's own language, pantomime, a language characterized sometimes as a most dangerous thing. The emergency, however, calls for desperate expedients, and the lan-

guage is used and the chasm bridged over. With advancing education, however, acquaintance with written speech advances quite rapidly, and comes to be used in place of the dangerous dialect of pantomime, licensed temporarily under protest. The permanence and clearness of a written statement give it as a method of communication a high value, and one recognized largely in the best hearing schools. But in school exercises, continued throughout a whole day, and day after day, a serious drawback arises from the great amount of time consumed in the merely mechanical labor of writing. Writing at the usual rate, as compared with ordinary oral speech, has been found to require a time about nine times as long. To obviate this evil the manual alphabet has been invented, and is now universally employed in the education of mutes. Finger spelling, confusing though it appears to a novice, really cuts down the mechanical element of time to one-third, or to only three times the time occupied by oral communication. Still, even with the assistance of the manual alphabet, written or spelled speech is to a mute exceedingly tedious. His mind chafes to escape from its mechanical fetters. No mute, however well educated, employs the manual alphabet to any considerable extent, much less written speech, in his familiar intercourse with his mute friends. The same is true also of those who spoke fluently up to a certain age, when, becoming deaf, they came to the institution for education. This irrepressible liking for another language does not, however, exclude the ready use of written speech, and, as a method, written speech, supplemented by spelled speech, should be employed in all cases where it is readily understood, and for a time as prolonged as may be, without wearying the pupil, or destroying his interest in the immediate object of recitation or attention. Its use will steadily increase until at length, in the more advanced classes, it will be used almost entirely.

3d. Why not use and require syllabic or word signs, made in the order of the English sentence?

The part of this question referring to syllabic signs has been already answered, for syllables have no value until the words which they compose are understood. Words learned, a syllabic alphabet, if clear, would be as much superior to the manual alphabet as it should prove to be more rapid. Of the various syllabic alphabets as yet offered to the mute, all have been rejected for their obscurity and ambiguity.

Word signs are ordinarily free from both ambiguity and obscurity, and win a ready acceptance. They are rapid, more rapid even than oral utterance. Now, why cannot a teacher, driven to the temporary use of pantomime before his pupils have gained a knowledge of written language, use it in a modified form, so constructing, dividing, and arranging a series of word signs as really to use the order of the English sentence, each word being represented by its own characteristic sign? Would not such a method tend to restrict the exuberant disorderly mental operations of the pupil to the order of the English sentence, and so, while escaping the detrimental influence of pantomime, prepare him, unconsciously, for the acquisition of a correct order

whenever, in his advancement, his word signs have become translated into their spelled, written, or, it may be, oral equivalents?

We do not claim for the English language an order the most natural, and yet we experience no particular difficulty in carrying forward our mental commerce along its channels. We are familiar with the fundamental connection existing between our mental order of thought and our written style. When we attempt to compose in a foreign tongue the influence of our vernacular speech in corrupting the necessary order of the sentence we know. And how often do we observe the same influence at work corrupting the English style of a foreigner. This corrupting influence of a vernacular language constitutes the central objection to the use of pantomime. From this element comes whatever of injurious influence it exerts upon the mute. Now, what difficulty is there in constructing a sign language to order, one from which the corrupting element of a faulty order has been eliminated?

Such has been the reasoning of the educators of deaf mutes for fifty years. The desirability of so important a result has been universally admitted, and to secure it, the sign making of institutions has been reduced rigorously to the order of the English sentence, and that for a generation. And in other institutions, with the same ultimate purpose, the same course has been pursued more or less, especially with the younger classes. And yet in every class of every institution in the land, the moment the pupil passes the threshold which separates the proprieties of the school-room from the freedom of ordinary social intercourse, every muscle, and feature, and limb of the pupil combine to enact a panorama of pantomime, in which many of the teacher's signs are used indeed, but no more resembling them than the finished garment resembles the fragments upon a tailor's table. All attempts to control the order of the mute's pantomime have utterly failed. The language has a genius and laws of its own which he who uses it must respect. Shall a teacher persist in using a language of his own, theoretically valuable, when every one of his pupils continually uses, and prefers to use another? With their remarkable ingenuity in comprehending signs, it is probable that they will catch the teacher's meaning with his English order, but not one of them will ever adopt it for himself, nor will the teacher himself use it outside of the school-room. Why not, then, when necessary, use the pupil's own language, inverted as it is, but no jargon, and so secure greater vividness of impression, and at the same time, by patient toil, educate the pupil away from the faulty order induced by his vernacular?

4th. Why use pantomime?

Or rather, why not use pantomime? What else can the teacher use in earlier stages of the course? And at every stage explanations will occasionally be needed, where nothing can be substituted for it. It is the natural language of every deaf person, whether born so or made so subsequently. Amid influences favoring the development and use of pantomime and uncounteracted, it will surely come, and the speech previously possessed will gradually disappear. This powerful proclivity of the deaf to pantomime is not always allowed its due weight. Because a mute boy, upon entering



school, has but a few uncouth motions, it is sometimes said that he learns his signs at school, which is largely true, and the wonder is expressed, why so much pains has been taken to teach what has so little value compared with the English language itself. And sometimes it is even suggested that the instructor has been delinquent in allowing the mental ground of the pupil to be so preoccupied. But the fact is, the teacher cannot exclude signs from use if he would. The language is the outgrowth of the mute's social instincts, and is as natural to him as oral speech is to the hearing. He came to the institution with few signs, because his circumstances had been unfavorable for their development.

How many articulate sounds, if indeed a single sentence, would a hearing child utter, if from infancy it had been confined to the society of mutes? Give the hearing infant a speaking parent, and it acquires oral language, and we say it is its natural language. So give a mute child a mute parent, and it will come to school at ten years of age with a sign language of considerable value. The rude sounds of the isolated hearing child and the uncouth motions of the isolated mute are both indications of a natural desire and adaptation for a better language. Two hearing children isolated would rapidly construct an oral language; and so two mutes associated will soon construct a stock of signs mutually understood. It matters not whether they are significant or conventional; they are signs, and are accepted by the users as representative of ideas. It needs no instruction to give a circle of mutes a sign language. A teacher can undoubtedly help them to one much more expressive and exact than the one which they unaided will adopt. He is familiar with the efforts of many years and, it may be, of generations. He has given to the language the study and the criticism of a cultivated taste. He can and, therefore, should do all in his power to improve their language, but he cannot prevent them from having one. The most stringent rules of articulating schools have never been able to repress it. Crushed to earth, it will spring up again upon the first shower of feeling. Semi-mutes even, who already possess a correct use of language and have a cultivated literary taste, take up the sign language, in spite of all the exhortations of their teachers, with great avidity, and prefer to use it ever after, when with hearing people even, if the latter will allow them to do so.

The mind of a deaf person craves a language addressed to a living sense. Any other language is to him an artificial one in the most real sense of the term. This natural tendency of the mute to the use of pantomime, and his actual use of it upon every conceivable subject, affords to the instructor an exact and rapid method of communicating with his pupils, if he chooses to use it. However educated the pupil may come to be in subsequent years, the time will never arrive in his history when he will not prefer it in conversation, if his companion is equally skillful in its use. Supplemented by manual spelling for technical expressions, it is fully equal to all the necessities of the school-room, the lecture-room and the pulpit. By using it, the teacher, the first morning of school, may communicate ideas and offer illustrations, which could not be introduced by the forms of oral or written lan

guage for years thereafter. However slow the pupil may be to remember his written or printed lesson, he forgets no pantomime. The teacher, however, knows that, potent and sufficient as pantomime really is as an educating influence and as a vehicle of ideas, yet the pupil must eventually come to the correct and free use of the ordinary forms of expression if he is to be, in any substantial sense, restored to society, and to have for himself the full benefit of books and newspapers. The judicious teacher will, therefore, use pantomime only when the slender stock of words understood by the pupil requires it. Used freely at first, it will gradually give way to better forms of thought, the teacher keeping his eye the while steadily upon that highest and best achievement of mute education—the ability to use the English language correctly.

Or, comprehensively, the true methods of deaf-mute education are—to use and require oral speech, if possible; or, if that cannot be, to use and require written speech, as far as it can be done intelligibly and without weariness, leaving for all those processes of education where neither is available the use of the mute's own pantomime, remembering ever that it is but a scaffolding, employed by the safe builder until the main structure—language—is completed, and then laid aside. The mute will, indeed, always return to it with the affection felt by every person for his own vernacular tongue; but living, as he does, surrounded by speaking persons, he will, however reluctantly, conform to their chosen medium of ideas, looking forward with earnest hope to that great unfolding where the many tongues of earth, discordant now, will blend in one universal language.

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#### METHOD OF INSTRUCTING DEAF-MUTE CHILDREN AT HOME.\*

For the benefit of those who desire to do all they can to instruct their own children before sending them to an Institution, the following description has been prepared of the method to be pursued. It is hoped that all having mute children will spare no pains in their home instruction, and however little progress may be secured, it will still be of value to the child. In some cases, it may be weeks, or months, before the child is able to write a single word, but if the plan here explained is perseveringly carried out, success is certain.

The method here presented is not a new one; it has been in vogue more than half a century, and is still used with great success by some of the best instructors. Possibly the section on Arithmetic, which grew out of a method used by the writer in teaching the elements of the science to new pupils, may have some new features. The method of teaching language, here presented, has not been published in a popular form, except by two writers.

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\*By James H. Logan, Principal of the Western Pennsylvania Institution.

The first of these, John R. Keep, Esq., of the Hartford Institution for Deaf-Mutes, published several years since a little book based upon a method essentially the same. More lately the system has been still further developed, and some novel modifications introduced by Dr. Isaac L. Peet, the well known and esteemed Principal of the New York Institution, in his "Language Lessons for Deaf-Mutes." To the latter the writer is indebted for some useful hints in the preparation of this article.

In addition to writing words and sentences, let the child also spell them by means of the manual alphabet, of which an engraving is given in this report. In memorizing this alphabet, the best way is to learn thoroughly each horizontal row of characters before commencing the next one below. If this is done, the alphabet will be perfectly mastered in less than an hour.

It is also well to use every means to preserve the vocal utterance of the child, for, though hearing cannot be recovered, speech may, in many cases, be retained, if the child is constantly practiced in the use of its voice.

The child may be taught as early as the age of three or four to write a few words. From that age, until six or seven, he should be practiced by the method here given, and then sent to some institution, where his progress will be very rapid if this preparatory home training has been well performed.

### I.

Begin by writing in a plain round hand the name of some common object. Show to the child first the object and then the name, pointing from one to the other until he sees that the name stands for the object. Get him to copy the word, and when he has mastered it, teach him another in the same way. Always write *the* before the names of objects. As above explained teach the following list of words containing all the letters of the alphabet:

the box.	the cup.	the mug.	the jar.
the key.	the quill.	the fender.	the razor.
	the watch.	the shovel.	

Besides these, the names father, mother, the child's own name, and those of his brothers and sisters, should be taught.

### II.

As soon as the child can write the names of five or six objects, sentences may be taught. To do this a short direction to do something, as, *Touch the box*, is shown to the pupil. Then the teacher himself touches the box and gets the child to imitate him. After several repetitions the child is made to copy the sentence, *I touched the box*, as the proper way of expressing what he has done. He is then directed in writing to touch some other object of which he knows the name, and, if he does not understand, the teacher again explains as before. This is repeated frequently until the pupil, on being shown a direction to touch a familiar object, will at once go and do so. This process of writing a short direction, showing the child what it means by simply performing the action indicated, and then having him copy the proper



form of sentence to express what he has done, is to be always carried out. Proceed in the same manner with many examples like the following:

Touch the key.	Touch the table.
Touch the cup.	Touch the chair.
Touch the mug.	Touch father.
Touch the jar.	Touch mother.
Touch the razor.	Touch John.
Touch the watch.	Touch Mary.

The teacher must also touch objects himself, and get the child to describe what he has done, by using *you* in place of *I*, thus:

You touched the fender.	You touched the fork.
You touched the shovel.	You touched the glove.

A third person should also be asked to do something in the presence of the child, and the latter taught to describe it, as:

Father touched the slate.	John touched the fan.
Mother touched the pail.	Mary touched the jug.
John touched Mary.	Mary touched John.

When the pupil has become expert in these exercises, direct him to touch two or more objects, which must at first be placed together before him. Vary all of the foregoing exercises, as in the examples given below:

I touched the hat and the key.  
 I touched the chair and the table.  
 You touched the fender and the shovel.  
 You touched the pencil and the slate.  
 Father touched the door and the mantel.  
 John touched the knife and the fork.

The same exercises should now be continued, with the following words in place of *touch*. Each word must be used quite often and thoroughly mastered before a new one is given:

bring,	open,	shut,	kick,	strike,	throw,
hit,	push.	pull,	gather,	break,	pare,
tear,	cut,	lift,	bite,	wash,	wipe,
sweep,	eat,	drink,	smell,	taste,	slap,
clean,	whip,	raise,	pat,	rub,	drop,
bind,	shake,	roll,	pinch,	lock,	unlock,
cover,	uncover,	toss,	fill,	empty,	scrape,
feed,	light,	punch,	tickle,	comb,	scratch,
		tie,	untie,	&c.	

The following phrases, it will be seen, are as easily explained as any of the single words above given, by merely performing the act indicated. These should be used very often, and with as many objects as are appropriate to them:

sit on, stand on, walk on, lie on, kneel on, write on,  
 play on, run on, jump on, roll on, stand in, stand  
 under, walk to, come to, go into, walk into, run into,  
 go out of, walk out of, run out of, put on, take off,  
 jump over, stand before, stand behind, stand beside,  
 stand near, walk around, walk across, stand between,  
 point to, bow to, shake hands with.

The following examples will show how the above phrases are to be used:

I sat on the chair.	I stood in the tub.
I stood on the box.	I blew out the match.
I went to the table.	I walked to the gate.
You ran on the grass.	You went into the house.
You turned off the gas.	You jumped over the stool.
You walked around the chair.	You sat near the fire.
John walked across the room.	Mary ran from the dog.
John stood before father.	Mary stood behind mother.
Mr. Smith put on the coat.	The cat jumped from the chair.
I stood between the chair and the table.	
I stood between the door and the window.	
John sat between father and mother.	
Father stood between John and Mary.	
You walked from the chair to the table.	
You ran from the door to the gate.	

### III.

The process of teaching color, size, form, possession, and number will now be considered. In explaining these, some object having the qualities described by the words used must always be placed before the child; otherwise the meaning cannot be made clear to him. He must always learn by seeing, handling, smelling, and tasting the objects.

To explain color, make a number of balls of yarn of different colors. These should be of black, white, brown, gray, purple, red, orange, yellow, green, blue, indigo, violet. Pieces of ribbon, cloth, or sticks painted of these colors, will answer as well. At the printer's, cards of most of the above colors can be had for a trifling sum.

Place one of the balls, say black, before the child, and write the direction—*Touch the black ball*, and proceed as before explained. Continue this with all the colors in turn. Then have all the balls together, or placed in different parts of the room, and keep on until the child, when directed to touch or bring a ball of any color will at once do so and write out what he has done. The exercise may then be continued with a variety of other objects having color, as flower, fruits, etc. Vary these exercises in all the ways before described.

Also, explain the following words of opposite meaning, with suitable objects. The contrast in meaning is a great help toward understanding them; and for this reason first one and then the other should be used:

hot, cold; hard, soft; wet, dry; clean, dirty; sweet, sour;  
thick, thin; fat, lean; sharp, dull; new, old; high, low;  
full, empty; smooth, rough; straight, crooked; wide,  
narrow; sound, rotten; fragrant, fetid; light, heavy; etc.

Size will now be considered. Get two objects of the same kind, but differing much in size, as stones, potatoes, apples, books, etc., and with these teach the meaning of the words *large* and *small*. Place both before the pupil and direct him to touch one, and give him the proper form of sentence to describe what he has been doing. Do the same with the other, and repeat until the words are understood.

Get two sticks, one long and the other short, and in the same way teach the meaning of *long* and *short*. Go on as before with other objects, such as pencils, strings, and cords.

Have the child learn to describe things belonging to himself and others. Let him touch something of his own, and write, as the case may be:

I touched my book.  
I touched my knife.

Then let him touch something belonging to the teacher and write:

I touched your hat.  
I touched your overcoat.

Next let him touch or bring things belonging to his parents and others of the family, and get him to write such sentences as the following:

I touched father's hat.  
I touched John's hand.  
I brought father's new slippers.  
I brought mother's red shawl.  
I brought Mary's little book.  
I brought John's large book.

#### IV.

In teaching number, get stones, sticks, beans, or acorns to count with. Then give the following directions, and show the child how to carry them out and express what he has done:

Put one bean on the table.  
Put two beans on the table.  
Put three beans on the table.

This exercise may be continued until all the numbers up to one hundred have been learned. Let the child learn both the names and the characters used to represent the numbers. Let the teacher himself, as well as other persons, put objects in different places, and teach the child to describe what they do. In this exercise, language as well as number is being learned at the same time, as the examples here given will show:

I put four books on the table.  
I put nine stones in the pail.  
I put fifteen beans under the chair.  
You put one stone and seven sticks in the hat.  
You gave two apples and three nuts to Mary.  
You put ten eggs in the basket, and five tumblers on the table.  
Father gave two figs and three apples to John.  
Mary ate six figs and four raisins.  
Mother dropped three knives and two forks on the floor.

Addition, subtraction, multiplication, division and fractions may be taught with very little real difficulty. Nothing more is required than to carry out with patience and judgment the directions here given. Until all the tables are mastered, objects must, in every case, be used to perform the operations with.

To teach addition, put down two beans before the child, and pointing from

one to the other, give him the sentence, *One and one are two*, to copy. When this is mastered place one bean at his left hand and two at his right, and let him write, *One and two are three*. Then, with one and three beans, placed in the same way, teach him to write, *One and three are four*. Go on in this way up to *One and ten are eleven*. Keep on until the child can write out this part of the table correctly.

Then, in order to test the child's understanding of them, write the above sentences in a different order, and leave blanks for him to fill up himself, thus:

One and three are \_\_\_\_.  
 One and five are \_\_\_\_.  
 One and one are \_\_\_\_.  
 One and seven are \_\_\_\_.

When the child is able to fill up the blanks with the correct number, no matter how the places of the sentences are changed, we know certainly that he understands. Should he forget, always demonstrate to him what the sum is by the aid of the beans or other objects used. Encourage him to use them himself in finding out the sums of other numbers. After a while he will be able to do without them; but at first they are indispensable. The other parts of the tables in addition may be learned in the same way.

When we come to subtraction we have simply to place a row of beans before the child, and taking away one or more, give him the proper form in which to express the operation.

Begin by placing two beans before him, and then taking away one, write *One from two leaves one*. So proceed up to *One from eleven leaves ten*. When this is mastered, change the places of the sentences and let the child fill up the blank spaces thus:

One from six leaves \_\_\_\_.  
 One from two leaves \_\_\_\_.  
 One from nine leaves \_\_\_\_.

Proceed in this manner until the tables in subtraction are thoroughly mastered.

In multiplication the beans are to be arranged in groups containing an equal number. First place one bean before the child, and another a little way from it, and have him write, *Two times one are two*. Then place two beans in each group, and write *Two times two are four*. Next put three beans in each group, and write *Two times three are six*. In this way proceed to *Two times ten are twenty*. As before, finish by changing the places of the sentences and leaving a blank for the pupil to fill up. Teach the remaining tables in the same way.

In division there may be a little more difficulty, but patience will overcome all. Here the process consists in arranging a row of beans before the child, and then separating it into groups containing the same number.

Place two beans before the pupil. With both hands separate them and draw each a little to one side. Then write *One is in two twice*. Now separate in the same way a row of four beans, and write *Two is in four twice*.

In this manner continue till *Ten is in twenty twice*, has been reached. Change the places of the sentences, and proceed as before described. Finish all the tables in division in this way.

The teaching of fractions is far less difficult than may at first sight appear.

Let there be some apples in the room, and give the child the direction, *Bring me one apple*. Take the apple, and in his sight divide it into two equal parts. Then write the direction, *Bring me one-half the apple*, explaining the phrase *one-half of the apple*, by pointing to it and then to the object. Then write, *Bring me two halves of the apple*. As in the previous exercises, let the child be practiced frequently, until he has mastered this. Show him that *one-half* and  $\frac{1}{2}$  mean the same thing. Now divide another apple into three equal parts, and direct him to bring one-third, two-thirds, and three-thirds of the apple. Next, divide one into four parts, and afterward divide others into five, six, seven, eight, nine and ten equal parts.

Get some sticks of equal length, and have them divided by pencil marks into equal parts. Then write out such direction as:

Cover one-half of the stick.  
Cover two-thirds of the stick.  
Cover four-fifths of the stick.

Let the parts indicated be covered over with a newspaper or anything convenient for the purpose. Repeat these exercises often and vary them in different ways, as the following examples will show:

Give one-half of the apple to Mary.  
Give one-third of the apple to mother and two-thirds to John.  
Put one-fourth of the apple on the plate and three-fourths on the window sill.  
Eat one-fifth of the apple and give three-fifths to father.  
Put four-tenths of the apple on the chair and five-tenths under the table.

## V.

Good pictures will be of great use, especially colored pictures of animals and other objects. By the aid of these the names of a great many things can be taught. Place a picture before the child and encourage him to describe what he sees, thus:

I see the cow.  
I see the horse and the wagon.  
I see two dogs and three pigs.  
I see the ship.

Also, direct the child to point to or touch objects in the picture, and also to show them to others. It is also well to teach the following expressions, while the events are actually taking place. By judicious management and constant repetition it will be possible to get the child to understand many

expressions of this kind. The teacher can make use of gestures on many occasions to assist in making the meaning clear:

It is raining.	The sun is rising.
It is snowing.	The sun is setting.
The leaves are falling.	The moon is not shining.
The dog is running.	The cat is sleeping.
John is walking.	Mary is jumping a rope.
Mary and John are dancing.	
Father is reading the newspaper.	
Mother is washing the dishes.	
Father and John are playing checkers.	
The hens are eating the corn.	

The following examples are given to illustrate the use of phrases which may be taught as readily as single words. These should all be learned by the pupil, besides many others which will readily occur to any one. The action indicated must always be performed first, and immediately after the child must write out in proper form what himself or others have done. The idea is to get the child to associate things taking place with their proper expressions, and this can only be done by frequent repetition. The exercises here given should, therefore, never be discontinued until from instruction received both at home and at school, a ready command of language has been acquired:

- Touch the knob of the door.
- Touch the panel of the door.
- Touch the lid of the box.
- Touch the side of the box.
- Touch the edge of the box.
- Touch the corner of the box.
- Touch the bottom of the box.
- Touch the end of the stick.
- Touch the middle of the stick.
- Open the door of the room.
- Shut the door of the closet.
- Stand in the corner of the room.
- Stand in the middle of the room.
- Bring a pail of water.
- Bring a bucket of coal.
- Bring an armful of wood.
- Put the bottle of ink on the table.
- Put the paper of tacks on the mantel.
- Put the ear of corn under the chair.
- Put a lump of coal in the fire.
- Put the book in the drawer of the bureau.
- Put an apple in father's coat pocket.
- Strike the door with your hand.
- Strike the chair with the long stick.
- Touch the dog with the cane.
- Hit the tree with the small stone.
- Hit the box with the red ball.
- Bring the stick with a notch in it.
- Bring the stick with two nails in it.
- Bring the stick with a notch in the middle of it.
- Bring the stick with a nail in the end of it.
- Bring the hat with the red feather in it.
- Put the book with a blue ribbon in it under the table.
- Put the stick with a red mark in it between the table and the chair.

Put the cup with a crack in it on the window sill.  
 Put the cup with a broken handle in the basket.  
 Place the blue stick across the red stick.  
 Draw a square on your slate.  
 Draw a large square on the sheet of paper.  
 Draw four small squares on your slate.  
 Draw two large circles on your slate.  
 Draw a straight line on your slate.  
 Draw a crooked line on your slate.  
 Draw a large square in the middle of your slate.  
 Draw a triangle above the square.  
 Draw three small circles under the square.  
 Draw a row of circles on your slate.  
 Draw a row of triangles on the sheet of paper.  
 Draw a horizontal line on your slate.  
 Draw a vertical line on your slate.  
 Draw an oblique line on your slate.  
 Give a glass of water to John.  
 Carry the basket of potatoes to mother.  
 Touch the knob of the door and the lid of the box.  
 Give the hammer and the box of nails to John.  
 Take the spool of black thread and the paper of pins to mother.  
 Give the red apple to Mary and the yellow apple to John.  
 Go up stairs and bring the ball of red yarn and the piece of blue cloth on the bureau.  
 Go down to the cellar and bring six eggs.  
 Go to the bureau drawer and bring the box of paper collars to father.  
 Take off your coat and sit down near the fire.  
 Put on your overcoat and hat and go to the post-office with John.  
 Go to church with Mary.  
 Make a bow to Miss Smith.  
 Shake hands with Miss Jones.  
 Play a game of checkers with George.  
 Play a game of blind-man's buff with the boys and girls.  
 Go to the grocery store and buy three pounds of sugar.  
 Help John carry the pail.  
 Take a walk in the garden with Mary.

These examples will suffice, and others on the same model will readily present themselves to the teacher. In teaching the names of things made up of two or more words, do not attempt to explain each word singly, but get the child to comprehend the meaning as a whole. This is usually best done by showing the thing, and then giving the phrase which signifies the thing and drawing a line under it like the following:

the piece of bread.

the ear of the cat.

the piece of brown calico.

the plate of nuts.

the plate of cakes.

the plate of apples.

the spool of thread.

the ear of the dog.

the pile of books.

the piece of red ribbon.

the piece of blue ribbon.

the piece of black ribbon.

It is very important to accustom the child to the use of such phrases. If the action indicated in the directions given to the child is performed over and over again, he will finally understand. Of course, in carrying out the



programme here laid down, tact and judgment must be used, and the more difficult sentences introduced gradually, as the pupil becomes able to master them. Praise the child, and encourage him in every possible way. It is quite easy to make children take a lively interest in these exercises, as the writer can testify from actual experience.

### METHOD AND PROCESS OF TEACHING MECHANICAL ARTICULATION AND READING ON THE LIPS.\*

The employment of articulation and reading on the lips as instruments of instruction is peculiar to the German school on account of the regular orthography in respect to pronunciation being favorable in the way of success, while the many inflections of the French and English languages interpose insurmountable obstacles to those who cannot call into requisition the aid of the ear.

The following methods and processes are given in full from the pen of Rev. Dr. Day, who was specially commissioned to enquire into all sources of information bearing upon the education of the deaf and dumb in Germany, with the view to refute the arguments of Horace Mann, Esq., Chief Superintendent of Education, U. S., who, in one of his annual reports, speaks in glowing terms of the success which crowns the efforts of the German masters in teaching articulation.

#### METHOD OF INSTRUCTION.

Before describing the manner in which speaking is taught, without the aid of hearing, it seems necessary to observe that *deaf mutes in general possess perfect organs of speech!* They make involuntary and frequently also voluntary sounds, and could they only hear what sounds are made by others in speaking, would be able to imitate them, or in other words to talk. As total deafness debars from all such knowledge, they necessarily remain silent or mute; in other words, they are dumb solely in consequence of deafness. Even where a child has already learned to talk, but subsequently at a tender age becomes deaf, he gradually loses one word after another, from no longer hearing them spoken, and finally relapses into silence.

The end proposed in teaching articulation is, by means of the eye, aided by the sense of touch, to supply to the deaf mute the lost sense of hearing. As different sounds represent themselves, each in a different manner, on the lips, or in the position and play of the vocal organs, although frequently with very slight variations, the effort is made to accustom the deaf mute to notice and recognize these positions and variations on the one hand, and on the other, to imitate them himself, with the addition of those emissions of

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\*By J. B. McGann, Head Master of the Deaf and Dumb Institution at Hamilton, C. W.



sound of which he is naturally capable. In this process nearly every teacher has certain peculiarities of his own, although in the main they do and must agree. In the following description Mr. Hill's course has been generally preferred, as being on the whole as successful as any, with occasional reference, also, to other teachers and published works.

1. *Qualifications required in an instructor.* In order to be a successful teacher of articulation, according to the German measure of success, it is necessary to have, *first*, well formed and perfect organs of speech, and correct pronunciation; *secondly*, an accurate knowledge of the vocal organs, and of their positions and motions in the production of different sounds; *thirdly*, skill in making the deaf mute perceive the different motions of the mouth, and teaching him to imitate them himself; and *finally*, "infinite patience." "The difficulty," says one, "consists more in the expenditure of strength, which the exertion of teaching the deaf and dumb to articulate requires, than in the understanding of what is to be done, which demands no special genius."

2. *General description of the method of teaching.* In order to make the pupil acquainted with the position of the organs necessary for the production of the sounds of language, the teacher places his own organs in the necessary position, makes the scholar by sight and feeling notice these positions; encourages him to do the same himself; and finally, proceeds from simple to composite sounds, that is, to syllables and words, and from these to sentences.

As *apparatus*, a looking-glass, in which the pupil may view the position of his own mouth, as compared with that of the teacher's, and a paper-folder, used to direct the motions of the pupil's tongue, are generally employed. Such contrivances as India rubber tongues, the expediency of which has sometimes been suggested, are in fact never resorted to. Some teachers, instead of a paper-folder, put their fingers into the scholar's mouth. This Mr. Hill discountenances, on the ground, among others, that "sometimes unwittingly and sometimes on purpose, the scholar is in danger of biting it."\*

One of the earliest requisites in such a course is evidently the power on the part of the deaf mute of making voluntary sounds. When the hearing is only partially lost, or the child has become deaf after having once learned to talk, and in certain other cases, there is no peculiar difficulty. Sometimes, on the other hand, considerable time and labor are spent in making the pupil understand what is required of him. At Leipzig I saw a little girl who had been under instruction a couple of weeks, but without making any progress. Day after day she had been called up, and the teacher had pronounced the

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\*I shall never forget the unpleasant impression made upon me, in watching the efforts of a little deaf mute who had been at school not quite three months, and to whom the instructor was laboring to teach the articulation of the letter *s*. The child did not bring his tongue far enough forward, and the only sound he made was that of *sch* (*sh*). A quarter of an hour the teacher spent in endeavoring to remedy the mistake, frequently running his paper-folder into the child's mouth, and pressing down his tongue, but without success. The exercise, it was evident, was laborious to the teacher, and toward the end especially most painful to the scholar. Indeed, at last the child lost all courage, and appeared the perfect image of despair. Although compulsion is sometimes obliged to be used, yet, on the whole, nothing connected with articulation appears so really surprising as the degree of patience exercised by the pupils.

usual sound *a* (*a* as in father), with the customary devices of prolongation and percussion, placing her little hand before his mouth and under his chin, to show her that the breath must be strongly expired, and a jar be made in the vocal organs, but all to no effect. She placed her hand, as she was directed, before her own mouth and under her chin, breathing strongly enough, but making no sound. As I saw her from time to time, on my visits to the school, with her mouth wide open, but in complete ignorance of the manner of producing the jar she noticed in her teacher, I became interested in the case, and requested the teacher to inform me as soon as she succeeded. In the course of the week he brought me word that she had overcome the difficulty. When his own patience was nearly exhausted another deaf and dumb girl had undertaken the matter, and instantly succeeded. Very possibly the teacher himself would have attained the same result had he continued his efforts a moment longer. The child, it appears, had first succeeded in making a sound when her hand was under her chin; and in consequence such an association between the vibration and the position of the hand was established in her mind, that in no other way was she able for some days to make any sound at all. The instant her hand was removed the sound ceased.

The process of instruction is exceedingly slow and elementary, and requires that only one scholar be taught at a time. Seating himself beside a window, so that the light shall fall fully upon his face, placing his head in an easy position, and bringing the scholar before him in such a manner that the pupil's eye shall be on a level with the teacher's mouth, the latter commences with a single sound, and then gradually passes on to others, until all are exhausted. It deserves to be noticed, although it cannot be said that one has borrowed the improvement from the other, that in Germany, both in the schools for hearing children and the deaf and dumb, the *sounds* of letters of the alphabet are taught instead of the names. For deaf mutes, indeed, no other course would be practicable.

The best *order* in which to teach the sound of the alphabet varies somewhat with different pupils; and hence it is the practice of the best teachers, as early as possible, to try all the sounds of the alphabet, in order both to test the pupil's capability, and ascertain to what points their attention must be specially directed. Generally, however, experience has shown the following order to be as successful as any, viz: *h*; *a* (*ah*), *u* (*oo*), *i* (*ee*), *p*, *t*, *k*, or *b*, *d*, *g*; *o*, *e* (*a* in fate); *au* (*ou*), *ai* (*i* in lion); *f*, *s*, *ch* (the last a peculiar sound; *w* nearly (*v*), *f*, *j* (*y*); *ä* (or *ae*); *b*, *d*, *g*, or *p*, *t*, *k*; *sch* (*sh*)! *m*, *n*, *ng*; *l*; *r*; *ö* *ü* (the two last have a peculiar sound). Care must be taken not to practice the pupil too long on the consonants alone, but, as soon as possible, to bring *k* and *t*, for instance, into connection with the vowels, in the formation of simple syllables. This is the first stage. With some variations in the order of the letters and syllables, relieved also by exercises in learning to make the written characters, the pupil is practiced in these elementary sounds during several weeks.

Next follow the consonants placed *after* the vowels, and forming of significant words, as *af*, *of*, *Ruf*, *Ohr*, etc. "The main object here is rather

mechanical readiness in speaking, than acquaintance with the meaning of words." Afterward, syllables are united into words and these into sentences.

What infinite patience is required in the course of instruction thus briefly sketched, in which the teacher's mouth, the looking-glass, and constant watching and feeling of the position of the tongue, must be relied on to supply the loss of hearing, a few of the mistakes into which the pupils are most apt to fall, will be sufficient to show. We may commence with the letter *h*. It is a mere emission of breath, but yet must be made in a certain fixed manner. In attempting to imitate the teacher the pupil not unfrequently makes a sound, instead of an aspiration, or sends the air through his nose. The remedy consists, for the first mistake, in placing the pupil's hand under his own chin, and then under the teacher's, and making him perceive that there must be no vibration; for the second, in pressing the tongue into the right position by means of a paper-folder; and for the third, in pressing the pupil's nose, and preventing the passage of the air in this direction. This must be repeated, until the pupil has acquired the habit of instantly recollecting the proper position, on the one hand, and the mechanical expertness necessary to secure it on the other.

In passing next to vocal sounds, as the deaf mute has no ear to guide him, either in respect to pitch or intonation, he can be expected in many cases to utter only those which are rude and unpleasant. Sometimes these sounds are so high as to be almost a scream; sometimes extremely nasal. To remedy these defects, even very imperfectly, is a work, as all confess, of time and labor.

The sound of the vowel *a* (*ah*) is generally attended with less difficulty than any other to the deaf mute. Still, if he opens his mouth too wide, or lifts his tongue too high, he is sure to make an incorrect sound. Such cases occur; and here the looking-glass, the folder and the teacher's mouth must again be brought into active requisition.

The vowel *i* (*ee*) not unfrequently makes a great deal of trouble, but "one must not lose courage if he does not at once succeed." The letters *p*, *t*, *k*, are often difficult for the less competent deaf mutes. Such mistakes as *mpe* instead of *pe*, *me* instead of *pe*, *t*, *ch*, and *ng* instead of *k*, are of frequent occurrence. *R* is for many the most difficult sound. Indeed, there is not a sound in the whole alphabet which has not to the deaf and dumb its peculiar difficulties, and does not subject them to the danger of mistake. In respect to the sounds peculiar to the German language, represented by *ö* and *ü*, the attempt to teach their correct pronunciation is seldom if ever made. Contenting themselves with the remark that these sounds are often confounded, by those who hear, with *e* and *i*, the teachers wisely allow their pupils to say *Mehre* for *Mohre*, *Bicher* for *Bücher*, etc.

The union of different letters in one word, and the modifications in sound which hence result, constitute a still further difficulty. A long time is usually requisite, in order to bring the slow-moving organs of the deaf and

dumb to the necessary quickness in pronouncing the *short vowels*. Sometimes they pronounce *i* (*ee*) and *o* like *ä* and *u* (*oo*). Sometimes they actually drop them. A very frequent mistake is the too great prominence given to the consonants, e. g.—*w, m, n, l, r*, when connected with the short vowels, which “of course renders the sound very unpleasant and unintelligible.” The union of consonants, without an intervening vowel, which demands for their pronunciation much exercise and flexibility of the vocal organs, constitutes a special difficulty for the unpracticed organs of the deaf mute. In pronouncing such syllables as *pla, tra, abt*, he is almost sure either to separate the consonants, take breath between them, or interpose a vowel sound, as *pela, tera, abet*, etc.

It would be tedious to follow out all the errors into which deaf mutes in this toilsome process fall, and the particular directions given for endeavoring to rectify them. What has already been said will be sufficient to show that this process is correctly called by the German writers *mechanical speaking*; that much time must necessarily be devoted to it, and that with the greatest efforts only a defective utterance can be reasonably expected, even under the labors of the most experienced instructors.

## 2. METHOD OF INSTRUCTION IN READING ON THE LIPS.

This branch of instruction, though carried on at the same time with articulation, has difficulties of its own, which are confessed by the German teachers to be peculiar and great. As the former exercises have for their object the enabling of the deaf mute to express his own ideas in articulate language to others, it is the object of this to teach him to understand what is said by others, by watching the motion of the lips. How formidable the attempt (well for the deaf mutes in the German schools that they are imperfectly aware of it) will appear from considering the following circumstances, mentioned by the German teachers themselves:

1st. There are many sounds which demand positions of the organs so entirely similar to each other, as it respects external observation, that only a *very* practiced eye can discover the difference.

2d. No peculiar opening of the lips is necessary in the pronunciation of most of the consonants. In such cases it is usually decided by the vowel immediately preceding, and as the lips then conceal, for the most part, the interior of the mouth, the scholar must hence, in respect to many consonants, remain in uncertainty.

3d. In the flow of discourse, sounds run so much into one another that only a very practiced eye can seize hold of the individual parts.

4th. The pronunciation of different persons has to the eye so many variations as sorely puzzle the deaf and dumb.

5th. In connected discourse, many sounds which properly belong to words are lost, which greatly increases the difficulty of understanding by means of sight. For instance, in the sentence, *this singer ran nineteen miles*, few persons pronounce so distinctly as to make the *s, r*, and *n* twice perceptible, even to the ear, much less to the eye.

So great are these difficulties, both singly and in combination, that it is not pretended that mutes ever become able, in ordinary discourse, to make out each word, or perhaps the greater number. All they do is to make out a few and guess at the remainder. This was distinctly told me by the most accomplished reader on the lips whom I saw in Prussia.

*Method of instruction.* In learning to utter sounds himself the deaf mute has the aid of two senses, sight and feeling; in learning to read on the lips, however, he must trust exclusively to his eye. Hence the need of special exercises in this department. The following may be pointed out as the most noticeable things in such a course.

1st. At first the teacher speaks as slowly as possible, opens his mouth wide, and distinctly utters every sound. The consequence is, as I have had repeated occasion to observe, that the pronunciation of many teachers to their scholars is very unnatural, and such as is *never* heard in society. This probably is one reason also of unnaturalness observable in the pronunciation of even the educated deaf mutes, which I shall presently have occasion to notice.

2d. The most experienced teachers divide the sentences they utter into small groups of words, with pauses between them. Sometimes this division goes so far as the making of a pause after every word or even syllable.

3d. Occasion is taken as often as possible to make speaking a medium of communication.

4th. The pupil is generally required to repeat after the teacher, either silently or aloud.

5th. When the pupil fails to catch the word it is either written in the air or on a slate, to aid him. A few teachers use the manual alphabet for this purpose.

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## THE ELEMENTS OF HUMAN SPEECH AS APPLIED TO THE INSTRUCTION OF DEAF-MUTES IN ARTICULATION.\*

We propose, in the first place, to try and explain what the elements of human speech are; and, secondly, to illustrate what we believe to be the best method of teaching deaf-mutes to make these elementary sounds, and combine them into syllables and words.

By the term *speech* we mean the expression of the thoughts by means of the voice, modified in its passage from the larynx to the outer air by the vocal organs, at the will of the speaker.

By the *elements* of human speech we mean those changes perceptible to the ear which the sound of the voice undergoes as it passes on, and of which all the syllables and words of a language are composed.

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\*By John Phillips, in the American Annals of the Deaf and Dumb.

The *prime* element of speech and song is produced by the vibration of the *chordæ vocales*, or vocal chords, set in motion by a stream of air passing from the lungs.

During the ordinary process of breathing these chords lie loosely, and incline toward each other at an acute angle. But by an effort of the will, as in speaking, and by the aid of certain muscles, they become extended and placed parallel to each other. In this position they are set in motion by the passing air and vibrate rapidly, making a noise, sound, or tone in the larynx.

This tone, as it passes on and escapes through the mouth or nose, becomes affected, varied, and modified by the glottis, palate, tongue, teeth, and lips, commonly called the organs of speech; and certain of these modifications are what we call the phonetic elements of any given language, or, in a wider sense, the elements of human speech.

Though the absolute number of sounds in any language may be said to be equal to the number of words in that language, yet the number of *elementary* sounds of which all the separate words of a language are composed is very limited; and on the printed page each is, or ought to be, represented by a separate symbol or letter.

The phonetic elements or elementary sounds of the English language are forty in number, according to Latham and Fowler, the most reliable authorities in England and America, and every Anglicized word in the language is made up of one or more of these sounds. They are divided into vocalic, or voice, and consonantal, or articulate sounds, and are produced, the former, by allowing the stream of air conveying the sound to pass uninterruptedly through the mouth; the latter, by checking the breath, and consequently the passing sound, by bringing certain parts of the mouth into contact.

Though the number of vocalic sounds we have the power of emitting is unlimited, yet a certain few are always agreed upon as *the* vowels of any particular language. In English we have twelve of these sounds, represented by only five letters; a striking illustration of how extremely deficient our alphabet is! So deficient, indeed, is it, that the forty primary sounds of our language have practically to be represented by twenty-three letters, our *c*, *q*, and *x* being redundant, in so far as sound is concerned.

Let us now examine the different sounds of our vowels, and account for them.

What causes the difference of sound or tone of *a* in *father*, in *fall*, and in *fate*; of *e* in *mete*, *o* in *note*, and *u* in *rule*, so perceptible to the ear?

How could we explain them in writing to a person at a distance, unacquainted with any of them? How could we illustrate them with our own organs of speech to a person whose closed ears were never penetrated by a wave of sound?

On analyzing the different vocalic sounds and their modes of production, we find they are formed and perfected in different parts of the mouth. The grave or Italian sound of *a* in *father*, the most natural of all voice sounds—the sound emitted by the infant on first breathing the breath of life; the sound, the different modifications of which are emitted by so many species



of animals, and the sound which justly takes precedence of all others in leading off the alphabets of so many different languages—is formed in, or emitted from the throat, with the mouth moderately open.

That of *a* in *ball* reaches up to the root of the tongue, and is sounded with the mouth wide open; while that of *a* in *fate* is collected in, and emitted from, the back part of the mouth.

The squeezed sound of *e* in *mete* or *ee* in *feet*, is formed in the middle of the mouth, by pressing the central top part of the tongue as closely as possible to the roof of the mouth without touching it, and forcing the breath between.

The name sound of *i*, and its long sound, as in *pine*, we have to discard altogether as a simple elementary sound, and classify as a double vowel or diphthong. Its short sound in such words as *fit* is in reality the short sound of *e* in *mete*.

The sound of *o* in *note* is collected, not in the throat, the back or middle of the mouth, but in the front part, just inside the lips.

The sound of *u* in *rule*, which is identical with that of *oo* in *pool*, is made between the lips, on protruding them; whilst that of *w*, very properly named in this respect, is produced by protruding the lips still farther, and nearly closing the circular aperture between them.

Thus we see that the peculiar tone of each vowel depends on the part of the mouth from which it proceeds, or the length of the buccal tube through which it is sounded.

The present name of our *u*, and its sound in *cube*, *tube*, etc., we have to classify as diphthongal. It originated in this manner: after the Norman conquest, our Anglo-Saxon progenitors, finding the close Norman *u* difficult for Saxon tongues to pronounce, preferred their own open sound of the letter. The proud Normans, on the other hand, disdaining to adopt the language of their conquered serfs, totally ignored the Anglo-Saxon *u*. Things went on in this way until the transition period of our language, when they compromised the matter by combining both into the diphthong *e-u*, or *u*, and thus transmitted to us in perpetuity a compound, instead of a simple or elementary vowel sound.

In treating of the sounds of the consonants, all we can do at present, without extending this paper far beyond its assigned limits, is to give the organic production of a few of them.

Consonantal sounds are those which do not coalesce into syllables and words except when joined to vocalic sounds, and pronounced with them. The former, however, can be isolated from the latter, and analyzed.

*B*, the first consonant and second letter of our alphabet, is sounded by closing or bringing the lips together, and then forcing them apart by the breath, or exploding the voice sound between them. If we close the lips, and, while keeping them together, try to give the name of the letter *b*, we recognize a sound, or something approximating to a sound, in the larynx. Whilst this is struggling to escape, if the breath forces the lips apart, the escaping air conveys the sound of this letter along with it.

The sound of *p* is produced organically in the same manner as that of *b*, with this difference: that while keeping the lips closed and attempting to give the sound or name of *p*, no hum or struggling sound is heard in the larynx. The breath barely presses against the lips and interior of the mouth, and on its explosion conveys the sound of this letter.

The sound of *b* is said to be sonant, because the *voice* is an indispensable element in its production. The sound of *p*, on the other hand, is called surd, because there is no voice sound used in producing it. In sounding *b*, the vocal chords are set in motion; in sounding *p*, they lie quiescent, as in ordinary breathing. Their whisper sounds are identical. If we pronounce the words *bill* and *pill* successively, both in the lowest audible whisper, the one cannot be distinguished from the other, and the only way they can be known apart is by their connection, as, *the bill is paid; the pill is swallowed*. The sounds of both are said to be explosive, because we cannot dwell upon or prolong them, as we can those of *l*, *m*, or *n*.

These two are the only pure labial or lip sounds in the language, and their representative letters have each but one sound, though in a few words each is silent, as in *psalm* and *dumb*.

*M* is a labial-nasal. It is formed by closing the lips and forcing the voice sound through the nose. Several species of animals utter this sound. The cow, calf, deer, sheep, and goat give it as plainly as any human being. They often give it alone, without parting the lips and giving the vocalic sound after it.

Some grammarians say consonantal sounds are peculiar to man, and that animals utter vowel sounds only. This is a mistake.

*L* is produced by placing the tip of the tongue against the roof of the mouth, near the front teeth, and letting the sound and breath escape through the mouth.

*N* is a palatal-nasal, formed by placing the tongue against the palate, stopping the passage of the breath through the mouth, and forcing it and the voice sound through the nose, with the mouth open.

The sibilant *s* is formed by placing the tongue forward in the mouth and hissing the breath out between the front teeth, with the mouth nearly closed, but the lips apart. The other sibilant, *z*, is produced in the same way, with this difference: the voice enters into the composition of the latter sound. The *s* is surd, the *z* sonant. The same relation exists between them as between *p* and *b*. From this it is evident there can be no more organic difficulty in sounding *s* than *z*, the testimony of foreigners to the contrary notwithstanding. Indeed, the difference is in favor of the *s*, as may be seen in comparing the *s* in *seal* with the *z* in *zeal*, the latter being the more complicated, as more organs are requisite to pronounce it; yet a German finds no difficulty in pronouncing the latter word, but finds considerable in sounding the former correctly, and for this reason: in German, the *s* is sonant, and the *z* surd—just the opposite of English. The Germans sound *s* nearly as we do *z*, the voice sound not being quite so strong; therefore a German, in speaking English, pronounces *seal* nearly as we do *zeal*, and complains that our



letter *s* is so hard to sound! The *z* in German is a compound sound, represented in English by the letters *ts*. The German word *Zelt*, for example, is pronounced in German as if written *tzelt* in English. Who will argue that our English word *Celt*, which we pronounce as if spelled *selt*, would be more easily pronounced if spelled *tzelt*? In short, be it well understood that, organically, the sibilants *s* and *z* are more easily pronounced or sounded in English than in German, and, consequently, are sounded with greater facility by Englishmen in English than by Germans in German.

The sound of *th* is an elementary one, though represented in modern English by two letters. It has, properly speaking, two sounds, being surd in *thick*, *length*, etc., and sonant in *the*, *this*, etc. In Anglo-Saxon, the surd sound was represented by one letter and the sonant by another, both of which, unfortunately, afterward fell into disuse. The surd sound is made by placing the tip of the tongue against the upper front teeth and forcing the breath between; the sonant, by forcing the voice sound out along with the breath. There is no organic difficulty whatever in pronouncing either of these sounds. They are, at least, quite as easily made as those of the sibilants. Yet what a hindrance are they to Frenchmen and Germans in learning to speak our language correctly, because they have no sound approximating to either in their own languages. When surd, they give it the sound of *t*, as *tick* and *pat* for *thick* and *path*: when sonant, that of *d*, as *den* and *dat* for *then* and *that*.

These few remarks are all we can now make on our consonantal sounds. We have had to be very brief, and refer to only a few of the elementary sounds of our language, either surd or sonant, vocalic or articulate.

We are now prepared to take up the second part of our subject, and explain what we believe to be the best method of teaching deaf-mutes, and more especially *semi-mutes*, to produce or make these elementary sounds, and combine them into syllables and words—that is, to speak as other people do. In doing so, we shall sketch barely an outline map, leaving details to be filled in as the ground is gone over.

The first thing to be effected is to get the pupil to make a noise or sound in the larynx, by setting the vocal chords in motion. All teachers of any experience know how to begin here. When the pupil can make this sound voluntarily in a conversational tone of voice, without putting the hand to the throat, the first step has been made in advance.

This sound, as already stated, is the prime element of speech and song in man. And though we never expect to evolve song out of this rude element under existing circumstances, yet to develop it into speech is our reasonable expectation.

As good a way as any to go about this is first to convert it into vocalic sounds. For this purpose we take one of our pupils and seat him in front of us; then, opening our mouth, we give successively the sounds of *a* in *father*, *a* in *fate* *e*, *o*, and *u* in *rule*, directing at the same time the pupil's attention to the different positions of the mouth as the sounds one after the other are given. After pointing to the letters, and giving their sounds over

and over again, the pupil is directed to open his mouth and try to do the same. In trying to get his pupils to follow his directions, each teacher is thrown almost entirely upon his own resources. The signs and motions that one pupil will understand will often be incomprehensible to another. One method or expedient, which we have found to be an excellent one, is to take a short tube of some sort, and explain to the pupil by some means that in sounding the vowels the mouth is shaped into tubes of various lengths. That the sound of *a* in *father* proceeds from the extreme back part of the mouth; *a* in *fate* from the end of a short tube extending above the root of the tongue; *e* from one extending to the middle of the mouth and terminating at the top of the tongue pressed close to the roof of the mouth, but not touching it; *o* from a wide tube the whole length of the mouth; and *u* (in *rule*) from a long narrow tube not only the full length of the mouth but extended to the middle of the lips, protruded in the shape of a funnel. So soon as the pupil succeeds in sounding any of the vowels, we signify our assent, and point to the letter; then make him sound it again and again until the position of the mouth is fixed in his memory. When he sounds another we do the same, and indicate to him that it issues from a position in the mouth either backward or forward of the other one, and so on until these five vowels are mastered.

We now turn to the consonants, paying no attention to the other vocalic sounds for the present. We begin with the cognate consonants. We take *p* and *b* for instance. The sound of *p*, if it can be called a sound, is very easily given, being barely a puff of the breath between the lips; then, in giving *b*, we place the pupil's hand upon our throat, just above the projection of the thyroid cartilage, where he feels the thrill caused by the vibration of the vocal chords, and at once comprehends that the voice sound is indispensable in giving the sound of this letter, but has nothing to do in giving that of *p*; and that this is the only difference in their organic production. In the same manner we proceed with *t* and *d*, *k* and *g*, *f* and *v*, *s* and *z*.

We may next take all the letters of the alphabet in rotation. The pupil will recognize the fourteen already known to him as old acquaintances, and the twelve strangers can be introduced one by one. When this is done, the pupil may be said to have advanced a second step or stage in his course of instruction, although there are many elementary sounds he cannot yet articulate.

We now begin to exercise our pupils in combining all the consonantal sounds they have learned with each of the five vocalic sounds at first acquired, as:

*bā, bā̇, be, bo, bu,*  
*dā, dā̇, de, do, du, etc.*

Then place the vowels first, as:

*ām, āṁ, em, om, um, etc.*

There are a few sounds which will not coalesce, as *aq*, *eq*, *xa*, *xe*, etc., which of course must be omitted.

For these exercises we strongly recommend the old-fashioned spelling-books containing the "abs," as they used to be called, or cards with the "abs" printed on them in all their combinations. These exercises serve the double purpose of combining two elementary sounds into one, and fixing the sounds of the letters or their organic productions in the memories of the pupils.

While these exercises are going on, the remainder of the forty elementary sounds may be mastered one by one, viz: *a* in *all*, *th* in *thin* and *then*, *ng* in *song*, etc. When these exercises are completed and all the elementary sounds acquired, the pupils will have advanced another stage.

Now comes our first, or if not our first, certainly our greatest real difficulty: we have now to make our pupils combine three or more simple sounds into one compound; in short to combine sounds into syllables and monosyllabic words—the most difficult task to be accomplished in the whole course of deaf-mute instruction in articulation. Such, at least, has been our experience. After the sounds of the letters are acquired it is easy to get deaf-mutes to combine two sounds into one, in *ba*, *be*, *bo*, *bu*. But when we come to add another sound or letter, as *bad*, *bet*, *bon*, *bus*, they pronounce them *bad-da*, *bet-ta*, *bon-na*, *bus-sa*; and it is all but impossible to make them drop this additional syllable at the end of each. The reason is this: when an ordinary person says *but*, for instance, the very instant the tip of the tongue touches the roof of the mouth, makes the *t* sound, and completes the word, that instant the vocal chords stop vibrating and the voice sound ceases. To be sure, it may cease only for an instant, yet it ceases. But the deaf-mute prolongs the sound until after the tongue is detached again from the roof of the mouth, consequently he says not *but*, merely; he says, *but-ta*. Placing the tongue against the roof of the mouth and checking the breath in saying *but*, has a tendency to stop the voice sound; and the pupil must be trained not to continue the sound with the escaping breath on the removal of the tongue. Again, it is often less difficult to break a deaf-mute from saying *but-ta* than *man-na*, because the tongue in the *t* sound checks the breath and sound for an instant, whereas in the *n* sound it only changes the course of the breath and sound from the mouth to the nose.

This defect in articulation has to be remedied before a pupil can be advanced a step further. While a pupil says *man-na* for *man* it would be futile to put him on to words of two or more syllables, or to join short words in the form of sentences. If we try to make him say, *Man is mortal*, he will say, *man-na is-sa mor-a-tal-la*, and will draw it out in such an unnatural tone of voice as will be distressing to listen to. Unless he can be broken of this, it is far better to waste no more time in trying to teach him to speak.

But how this defect can be remedied is a question more readily asked than answered. We suggest: write down the word *man-na* just as the pupil

pronounces it, and show it to him, comparing it with the word *man* as it ought to be pronounced. Let him see "what his mouth is doing," as Mr. Bell aptly expresses it. Then make him speak it quickly; do not give him his own time to drawl it out and supplement it with the *na*. Make him utter *man* in a short, explosive sort of shout; and when that is said, do not give him time to put his suffix at the end of it, but raise your hand, or clap your open palm to his mouth and keep back the *na*.

Making the pupil explode his syllables at once will have many desirable effects. It will throw life and spirit into his manner and tone of voice; it will check that mechanical drawl in his speech, so tedious to him and distressing to the ear of the listener, and with the aid of dozens of other expedients which the ingenious teacher may devise, will in time remedy the defect we are speaking of, in the majority of instances.

All deaf-mutes that surmount this last difficulty will have smooth sailing beyond. *They* can be taught to *speak*. By this we mean they can be taught to articulate a sufficient number of words to express their ideas and make known their wants. Their vocabulary can be extended to that of a child of five or six years, and will chiefly consist of words of Anglo-Saxon origin, easily pronounced, and not containing many silent letters. Difficult words of classic origin, or what children call hard words, we need hardly expect many of them to make much progress in articulating, though of course we may meet now and then an exceptional case.

We feel called upon in this communication to express our opinion of Mr. Bell's system of "Visible Speech as a means of communicating articulation to deaf-mutes."

Were we to consult our own feelings at present we should say nothing on the subject, but should leave it to time and experience to sanction or set aside that system. Having, however, expressed our opinion of it upward of a year ago, and that opinion being adverse to the system, we are now reasonably expected to reassert or retract it; and as our opinion is yet unchanged, all we can do is to state it again, in substance, as briefly as possible.

We have no faith in "Visible Speech as a means of communicating articulation to deaf-mutes," as treated by Mr. A. G. Bell, in the *Annals*,\* because it is inapplicable to the purpose; because neither the system nor any symbol of it has ever yet been the "means" of communicating the articulation of a single elementary sound to any deaf-mute, or ever can be; because deaf-mutes have to learn to articulate before they can understand the symbols or alphabet of "Visible Speech," or the "deep meaning underlying" these symbols; because, in short, Mr. Bell "puts the cart before the horse," for it is articulation that is the means of communicating "Visible Speech" to deaf-mutes.

Indeed, we are thoroughly convinced that instead of "Visible Speech" being a help in teaching deaf-mutes to articulate, it is a great hindrance; and that, however successful Mr. Bell may be in his laudable endeavors, he would be much more so if he could resolve on throwing his "Visible Speech" to

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\*Vol. xvii, p. 1.

the winds, and substituting the letters of the alphabet as the representatives of primitive sounds, deficient as they are in number.

That we are correct, we think will be evident from the following considerations.

In teaching an ordinary child the alphabet, we point to each letter and name it, the child naming it after us. In commencing to teach a deaf-mute to speak, we point to each letter and give its *sound*; but as the mute cannot hear, we have to show him how the sound is made.

As an example of the manner in which a deaf-mute is taught to articulate a particular sound, let us take that represented by the letter *m*, and compare the ordinary method with that of Mr. Bell. The teacher, after pointing out the letter, closes his lips in the presence of the pupil, and placing one of the deaf-mute's hands upon his (the teacher's) throat, and the other upon his nose, sets the vocal chords in motion, and this produces the nasal hum, the peculiar sound of this letter. Whilst the teacher continues to prolong the sound, the pupil feels the thrill caused by the vibration of the vocal chords in the larynx with the one hand, and the thrill at the sides of the nose and the escaping breath with the other. After the repetition of this a few times until the mute understands to what his attention is being directed, he is motioned by his teacher to close his own lips, place one of his hands upon his own throat, and the other upon his nose; and if he succeeds in making the thrills in his own throat and nose, he has the required sound, for no one can produce these thrills with closed lips without making the sound represented by the letter *m*. At first the pupil may make some very awkward motions in trying to imitate his teacher. He may make a disagreeable gurgling noise in the throat, or expel the breath too forcibly from the nose, but under the direction of his teacher he soon gets over this, and after making the real sound a few times and finding how easily it is done, he becomes encouraged. After repeating it for a few days or weeks in succession along with other sounds, and especially after combining it with the vowel sounds previously acquired, he will never forget it. He will sound it *instantaneously* on the letter being pointed out to him, without waiting to think *how* the organs of speech are to be placed, and with as little hesitation as an ordinary child gives its name.

This is the method we followed before ever hearing of "Visible Speech." This was the method followed in Germany before we were born.

Now for Mr. Bell's method. Instead of taking the letter *m* as the representative of this sound, he introduces his symbol. He represents this simple sound by a compound character, consisting of four elementary parts, or *simple* characters. These simple characters are straight and curved lines, arbitrary representatives of the under lip, the nose, the sound of the voice, and the verb *to shut*. These four elementary signs, combined in a certain manner into a compound symbol, represent the sound of *m*, and when explained, mean "lip, shut, voice, nose," or, "Shut the lips, and pass the voice sound through the nose."

This symbol, and all its parts, Mr. Bell now explains in full to his pupils.

Well, of course they all at once shut the lips, pass the voice, and give the sound of the letter *m*? Oh, no; not at all! What then? Why, Mr. Bell just takes his pupils one by one, and goes through the very same *modus operandi* we have just been describing!!

Not one of his pupils even understands the symbol, or knows anything about the "deep meaning underlying it," until he has learned the organic production of the sound that symbol represents; nor then either, in all cases, we are inclined to believe.

Unless we look upon Mr. Bell as an enthusiast, it is inexplicable to us that, after going the rounds we have indicated in teaching a deaf-mute the organic production of an elementary sound, he attributes his success in making him produce that sound to one of those symbols of "Visible Speech."

In conclusion, we freely confess that all the information we have had in regard to "Visible Speech" as a means of instructing deaf-mutes is contained in the article mentioned, and if we misrepresent the utility of that system we do so involuntarily. That article is written in such plain, unequivocal language, that we do not think it possible we can be mistaken.

If at any future time we find we are in error in regard to the system, we shall take great pleasure in acknowledging it.

We believe that, whether "Visible Speech" is a help or a hindrance, Mr. Bell has done good service in pressing the question of articulation on the attention of the educators of the deaf and dumb, and that the time is gone by when a child who loses his hearing after learning to speak must necessarily lose his speech also.

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#### ON ATTEMPTED CURES OF DEAFNESS.\*

As it is desirable that the credulous portion of the community should, at all times and on all subjects, be guarded against the designs of traveling doctors, I propose to examine and to state, in the present letter, all that zeal and science and humanity have been able to effect for the physical relief of the deaf and dumb, in order that a plain wayfaring man may form his own judgment as to the benefit he may probably derive from seeing an advertising or a be-puffed aurist.

I am willing to allow that there are cases of partial deafness that may be relieved by the simple modes which are known to every well educated surgeon; but my remarks will chiefly refer to the attempts to cure *total deafness* and are not intended to apply to the regular practitioner, but to that class of professionals who prey on the unwary, and by their exorbitant

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\* By Charles Baker, Head Master of the Institute for the Deaf and Dumb, Yorkshire, England.



demands and magnificent promises of benefit to be derived, tax the pockets of the community, and bring the art of healing into disrepute.

Empirics abound in our country, and are not confined to those who profess to cure. A particular preparation is found serviceable in removing or alleviating a complaint. With no more knowledge than this bare fact, some person who hears of it and has the same complaint, or who fancies he has it, applies the remedy, without considering—indeed, without the means of knowing, if he did consider—whether he is in the same circumstances as to habit, temperament, diet, etc., as the individuals previously relieved. Should the nostrum be successful, or be thought to be successful (for the patient's natural constitutional vigor may have triumphed over the disease), its fame is trumpeted forth; should he experience no relief, the application of the intended remedy is soon forgotten. Empiricism, in its best sense, is not to be relied upon, nor should an experimenter, known as such, be suffered to enter the field against that man whose practice is founded less on his own experience than on a knowledge of the parts and offices of the wonderful moving and reasoning machine whose irregularities he is called upon to repair, and reinstate in their native vigor. Hence the danger of universal medicines; the folly of single specifics; hence, too, the misleading tendency of a custom into which many reputable medical practitioners have fallen, of appearing to countenance empirical preparations by testifying to their efficacy.

Every important organ of the body is liable to a variety of disorders; now, what can be thought of a practitioner who professes to cure all the disorders, *of only one organ*, by a single specific? Yet such is a common profession, and it is encouraged, as the victims to the practice can readily testify.

The human ear is one of the most delicately formed organs of the human frame. It is subject to a great variety of diseases; the parts adjacent are also subject to diseases by which this organ is affected. Some of these disorders occur before birth, some are not developed till after birth, and some supervene on other diseases. The principal diseases to which the organ itself and the adjacent parts are liable, are the following:

Malformation of the auricle, or external ear.

A diminished or an excessive secretion of wax.

Obliteration of the auditory passage.

An enlargement of the auditory passage.

Extraneous matter in the Eustachian tube.

Closure of the Eustachian tube.

A gristly consistence of the auditory nerve.

Disease of the brain.

Diseases of the throat and glands.

The auditory passage being loaded with hardened wax.

The growth of polypi from the lining membrane of the auditory passage.

Total deafness, as I have said, follows upon various diseases. The records of the various institutions will show that deafness follows upon hydro-

cephalus, brain fever, scarlet fever, measles, dentition, convulsions, inflammation of the lungs, colds, small-pox, whooping-cough, and other diseases.

I would therefore ask any rational person to consider, if the man who professes the cure of the various diseases of the ear, and its parts, by any *one* remedy, is likely to be successful in *many* cases, the diseases being so distinct, and the *causes* of such diseases so totally different. My experience among the deaf and dumb has extended over fifteen years, and during the whole of that time I have inquired much into the physical means employed to restore hearing. I have heard of some instances of partial success in cases of acquired deafness; but I have heard of but one single instance in which a totally deaf person was restored to hearing, and this was at Brussels fifteen or sixteen years ago. This case I only know of by report, and have never seen it recorded. Hundreds of attempted cures have been made known to me; professional men of high character and attainments have devoted themselves to the subject, but in all cases they have ultimately despaired of success, have left the practice, and the ground, thus deserted by regular practitioners, under the impression that nothing satisfactory could be achieved, has been most profitably occupied by empirics, and ignorant pretenders.

Two hundred years ago it was a general opinion that dumbness was caused by some organic defect in the organs of speech. It is now well known that the deaf have the power of producing vocal sounds, and indeed of speaking and reading, and that these persons are dumb only because they are deaf. When this was first ascertained, it was natural that every method should be resorted to that science or medicine offered, to accomplish their restoration to hearing, for possessing this faculty, language would soon be acquired, and they would be at once restored to the society of their fellow men.

Many distinguished physicians have, in different places, directed their skill and science to various modes of curing or relieving deafness. Among these, the much lamented Sir Astley Cooper and Mr. Cleland, in England; Drs. Itard and Deleau, in France; Hendriskz and Guyot, in Holland; and Hymly, in Germany; may be mentioned as having taken extraordinary pains to insure success in the means they devised and adopted.

It is now universally believed among those who have given the most impartial and disinterested attention to the subject, that there is nothing sufficiently encouraging in all that has been done to warrant the conclusion that deafness can be removed, though it may be alleviated in some cases, in a slight degree, and that the very few instances of its removal must be regarded as isolated exceptions, which do not destroy the general principle.

Such have been the efforts of the skillful and the scientific to remove deafness, and so little the success by which they have been attended. Enough, however, has been done to show that it is difficult, and generally impossible, to discover *the cause of the deafness*; and that when it has been discovered in a few instances, the *most various modes of treatment have failed in imparting hearing*; and enough to lead any one to the very reasonable con-



clusion that the man who professes to restore the deaf and dumb to hearing and speech is merely a pretender; and that if he professes to do this by any single mode of treatment, he should be driven from respectable and informed society, with the stigma of impostor attached to his name.

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### HISTORY AND METHODS OF DEAF-MUTE INSTRUCTION\*.

The eye of the deaf-mute is bright and active. All the wealth of beauty in form, color, and arrangement in the world around him, is open to his enjoyment. His only physical disability is the want of hearing. In most cases, the closest inspection can discover no imperfection in the ear of the living person, and after death, dissection detects none. For some mysterious reason, the auditory nerve fails, in his case, to transmit to the brain the vibrations of sound. A casual observer might regard this as an inconvenience, rather than a serious deprivation. To the well-furnished mind of the scholar, even total deafness brings no direct infliction. It is simply cutting off certain channels of communication with the outward world, and does nothing to impair the value or the availability of the treasures within. Deafness, to a mature mind, is only a negative loss, not a positive infliction. Notwithstanding these considerations, sad experience shows that when total deafness occurs at birth, or in the early years of life, it is one of the sorest calamities that afflict humanity. The deaf-mute is cut off almost entirely from communication with his fellow-men. He hears nothing of the conversation of the family circle and the social meal. Of the incidents occurring in the community of which he forms a part, and which make up so much of the history of individual life, he knows only what takes place under his own eye. A large portion of our knowledge, in the early periods of life, is derived from the observation and experience of others. The channels which render this light and intelligence the common property of other minds, are to the deaf-mute closed. He knows nothing of the shape of the world in which he lives, of the races that inhabit it, or of their past history. The family traditions of place and country, the exploits or renown of ancestors, which might excite a worthy pride or stimulate to an honorable ambition, never fall upon his palsied ear. More than all, his infirmity draws a thick veil over the realities that lie beyond the present life, and hides from his view the immortality that awaits him. So dark and inert is his mind, that the great problems of a future life, fail to awaken his curiosity or excite his attention. There is no authenticated case on record of a congenital mute who, by his own unaided efforts, has found out the being of a God, or discovered the fact of his own immortality. It is the universal testimony of educated mutes, that previous to instruction, they had no knowledge of

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\* By Rev. Collins Stone, in *American Annals of the Deaf and Dumb*.

these great truths. The deaf-mute, therefore, though he may be living in a Christian community, and the object of tender affection, yet, from the ignorance and terrible darkness of his condition, appeals most touchingly to every kind feeling of our nature. It is estimated that at least five hundred thousand of the human family are thus afflicted.

As the same causes that now produce this infirmity, have always existed among men, deaf-mutes have probably, in all ages, constituted a portion of human society. Repeated allusions made to them in the Scriptures, and in ancient history, confirm this supposition. Their condition has of course been modified by the kind and degree of the civilization in which they have lived, yet we have abundant evidence that their lot has been a hard one. In early times, and in uncivilized communities, they were regarded as monsters. They were thought to be under the special curse of God, and their infirmity was looked upon as the direct result of Satanic influence. Deaf-mute children were often put to death as soon as their infirmity was discovered. The familiar couplet of Lucretius:

"To instruct the deaf, no art could ever reach,  
No care improve them, and no wisdom teach,"

seems to have been the judgment of thinking men, upon the hopelessness of their condition. As late as the fourth century, Augustine declared that, "as faith cometh by hearing," it was manifestly impossible to the deaf-mute; he could neither hear the word, nor learn to read it. The code of Justinian, which seemed to embody the essential principles of right, for all countries and for all times, by positive and distinct enactment, denied the congenital mute all civil rights, consigned him to perpetual legal infancy, and considered him as incapable of managing his own affairs, or of transmitting his property.

During the golden days of Grecian and Roman refinement, the art of expressing ideas by pantomime was much cultivated, and was carried to a high degree of perfection. It is related that a contest once took place between Cicero, the eloquent Roman orator, and Roscius, the great comedian, to see which could express a thought most forcibly, the one by his gestures, or the other by his words. The very proposal of such a trial, indicates the attention which had been given to this method of communicating ideas. The sculptor, by attitudes and expressions of the countenance, caused the breathing marble to speak forth the feelings of the soul. The painter pictured upon canvas the course of history, and described the progress of nations, and the exploits of individual men. Ideographic language was in use, particularly among the Chinese and the Egyptians. It is remarkable that it should never have occurred to the gifted men of those times, by some of these methods, to address the eyes of that large class among them, whose ears were closed to the entrance of sound. We search, however, the records of Grecian and Roman civilization in vain, for the account of a single deaf mute being educated, much less for the establishment of a school or system of education for their benefit. Individual cases may have occurred in the

course of these long, dark centuries, in which ingenuity and affection discovered methods to break in upon his isolation, and bring him forth to the light. If such cases existed, they were single spots of brightness in a field of wide-spread and impenetrable darkness. The Scriptures tell us that the touch of the Master brought instant restoration to many of these stricken ones; and it is only under Christian institutions that their condition has excited attention, and efficient means have been taken for their emancipation.

To Pedro Ponce de Leon, a Spanish monk, of the fifteenth century, is usually accorded the high honor of being the first successful instructor of deaf mutes. Ponce was born in the city of Valladolid, in the year 1520. His first pupils were two brothers and a sister of the Constable of Castile, and afterward he is supposed to have had a considerable number under his instruction. According to his own account, he taught persons who were deaf and dumb from birth, "to speak, to read, to write, to keep accounts, to repeat prayers, to serve the mass, to know the doctrines of the Christian religion, and to confess themselves, *viva voce*." To some he taught Latin, to others Latin, Greek and Italian. It is quite possible, that some of Ponce's pupils were of a class who retained a portion of their hearing. The stories of these times partake largely of the marvelous, and Ponce's account of his work should doubtless be taken with allowance, yet he was probably highly successful as a teacher. Ponce died in the Convent of Ona, where most of his life was spent, in the year 1584, greatly honored for his benevolence and genius.

Some thirty-six years after the death of Ponce, John Paul Bonet, also a Spaniard, published an extended and valuable treatise on the art of deaf-mute instruction. The work of Bonet, now extremely rare, has the distinction of being the first formal essay published on this subject. It is a production of great merit, and shows its author to have been a man of brilliant genius. The manual alphabet, so generally in use among the deaf and dumb, is first found in Bonet's works, and he has been regarded as its inventor. It is known, however, to have been in use at an earlier period. Bonet died in 1629.

The first English writer on this subject was a physician by the name of John Bulwer, who, in 1648, published a book entitled "Philocophos, or the Deafe and Dumbe Man's Friend." On the title-page of his book he claims that "a man borne Deafe and Dumbe may be taught to Heare the sound of words with his eie, and thence learn to speak with his tongue." Bulwer was also the first distinctly to propose the use of pantomimic signs, as a means of teaching language.

The first practical teacher of deaf mutes in England was Dr. John Wallis, an eminent Professor of Mathematics in the University at Oxford. Dr. Wallis was distinguished as an able writer on deaf-mute education. His first work, "Grammatica Linguæ Anglicanæ," was published in 1653. His writings passed through several editions, and are held in high estimation at

the present time. One of his pupils was, in May, 1662, exhibited before the King and nobility, and the Royal Society of London.

In 1680 George Dalgarno published his "*Didascalocophos, or the Deaf and Dumb Man's Tutor*," an original and learned work which attracted great attention. Prof. Porter styles it, "one of the most remarkable and important productions in the whole history of the art."

During the sixteenth and seventeenth centuries, at various intervals, the peculiar conditions of the deaf mute attracted the attention of thinking men, and we find in Italy, in Holland, in France, Germany and Great Britain, notices of individual mutes who received education. The processes by which this was effected, however similar they may have been, were doubtless independently discovered by those who put them in practice. It should be remarked, however, that this relief came only to isolated cases—generally to members of noble families, who were able, by their wealth and influence, to secure such instruction, and richly to reward it; while the generations of deaf mutes, doubtless to be found then, as now, in all countries and communities, were left to grope their way in darkness and solitude through the world. It is only about a hundred years since, even in the most prominent countries of Christendom, systematic provision has been made for the great mass of this sadly afflicted class of society.

The middle of the eighteenth century is the brilliant era in the history of deaf-mute instruction. About this time, De l'Epee in France, Braidwood in Scotland, and Heinicke in Germany, founded Institutions, which, under various changes, remain to the present day. But more than this, it is through the labors and writings of these noble men, that the care and education of the deaf mute has been recognized and accepted in all Christian States, as the indispensable duty of humanity.

Among the names that shine out on the page of history, as the distinguished benefactors of the class we are considering, that of the venerable Charles Michael De l'Epee, is without question, entitled to the highest place. De l'Epee was born at Versailles, on the 25th of November, 1712. His father, an architect in the service of Louis XIV; impressed his children from their earliest years with principles of benevolence and piety. Young Charles early developed a character marked with purity, simplicity, and an ardent desire to do good to his fellow-men. When he reached the age for choosing a profession for life, his desires turned strongly to the service of the church, and he went through a course of study to fit him for its duties. On applying for ecclesiastical orders, however, he was required to sign a formula of doctrine to which he could not assent. This he refused to do. He then turned, reluctantly, to the law, and after making the necessary preparation, was admitted to the bar, and entered upon his new profession. He found it exceedingly distasteful, and soon became disgusted with the atmosphere which surrounded him. He had no pleasure in duties which brought him in contact with so much chicanery, duplicity and crime, and longed for some employment more congenial, and which might more fully gratify the ar-

dent wish of his heart to be useful. While his way seemed thus hedged in, an incident occurred that opened to him the path of usefulness Providence designed him to occupy.

Calling, one day, at the house of a friend, he noticed two young ladies engaged in needlework, and on addressing them, received no reply. Repeating his remark, he still failed to secure from them the least attention. On expressing his surprise at this seeming rudeness to their mother, who soon entered the room, she informed him that her daughters were deaf and dumb; and added, with tears, that their teacher having just died, they were now left without any instruction. The sympathies of the benevolent Abbe were warmly interested. "Believing," he says, "that these two unfortunates would live and die in ignorance of religion if I made no effort to instruct them, my heart was filled with compassion, and I promised, if they were committed to my charge, that I would do all for them I was able." De l'Epee now entered with enthusiasm upon his life-work. He at once opened a school for indigent deaf mutes, maintaining them at his own expense. He at first refused to receive the children of the rich, and afterward consented to do so with extreme unwillingness. "The rich," he said, "come to my house by tolerance. It is not to them that I have devoted myself, it is to the poor only; but for them I should never have undertaken the instruction of the deaf and dumb."

De l'Epee was a man of gentle spirit and of disinterested kindness. His income was but £400. Reserving £100 for his personal expenses, he devoted the remainder to the support of his indigent pupils, whom he regarded as his own children, giving all his strength in self-denying labors for their improvement and happiness. His warm-hearted kindness and his brilliant success, soon attracted the attention of the world. Crowned heads, and the highest orders of the nobility, crowded to his humble establishment to witness the progress of his pupils. Several incidents are related which show the simple and earnest spirit with which he pursued his labor of love. In 1780 the Ambassador of the Empress of Russia, on visiting his school, offered him valuable presents in the name of his Sovereign. The Abbe, declining the benefaction, replied to the Ambassador that he never received money, but if his labors seemed to impress the Empress as worthy of any favor, he desired her to send some poor ignorant child from her dominions, to whom he might give instruction.

Joseph, Emperor of Austria, also visited De l'Epee, and was astonished at his success. Expressing his surprise that so excellent a man should be in such straightened circumstances, he offered to confer upon him the revenue of one of his estates. Declining the generous offer, the Abbe replied: "I am now an old man. If your Majesty desires to confer any gift upon the deaf and dumb, it is not my head, already bent toward the grave, that should receive it, but the good work itself. It is worthy of a great prince to preserve whatever is useful to mankind." The Emperor, readily interpreting his wishes, dispatched one of his ecclesiastics, the Abbe Storch, to Paris,

who, after acquiring the art, established at Vienna the first National Institution for the deaf and dumb in Austria.

De l'Epee died in 1789, at the age of sixty-seven years, greatly beloved and lamented. He was buried, with distinguished honors, in his native city where a monument is erected to his memory.

In 1760, five years after the opening of the school at Paris by De l'Epee, Thomas Braidwood commenced the instruction of the deaf and dumb at Edinburgh. He at first began with one pupil, the son of a rich merchant of Leith. The number afterward increased, and he attained a success which excited great interest among the distinguished men of his time. Braidwood kept his methods a profound secret, endeavoring to make his art the source of pecuniary emolument. A lady is said to have paid £1500 sterling, for the education of her son in Braidwood's school. The great expense of this school, led to the establishment of the Asylum at Kent Road, London, where indigent deaf mutes might receive a free education. The London Asylum was opened in 1792, under Dr. Thomas Watson, a nephew of Braidwood. In 1782 Braidwood's school was removed to Hackney, near London, where it continued till his death, in 1806. His methods of teaching remained a secret in his family for sixty years. His school was the parent of those since established in the British Isles.

Samuel Heinicke was born near Weissenfels, on the 10th of April, in the year 1729. His father, a simple agriculturist, intended his son for the same employment. Heinicke, however, feeling a decided repugnance for so quiet a life, left his home, and, at the age of twenty-one, entered the military service of the Elector of Saxony. He remained here but a few years, in the mean time devoting his leisure moments to literary pursuits, in which he was greatly interested. He entered the University at Jena at the age of twenty-nine, applying himself to his favorite studies with great zeal. It is a singular coincidence that the same year, 1755, in which De l'Epee opened his school at Paris, Heinicke became engaged in the instruction of a deaf-mute boy in Dresden. In April, 1772, Heinicke, with nine deaf pupils, opened at Leipsic the first Institution for deaf-mute instruction in Germany, which has since been followed by a large number of flourishing schools. He continued his benevolent labors with marked success till his death, which occurred on the 30th of April, in the year 1790. A circular, issued a few years since to raise funds for a monument to his memory, thus speaks of him. "He was a man of pure character, of a sensitive and profoundly religious spirit, gifted with the rarest qualities of genius, of a clear intellect and noble heart; who, full of the liveliest sympathies with the misfortunes of his fellow-men, made it the labor of a life, consecrated to God and humanity, to comfort the forsaken, to dry the tears of those who wept, and to minister to all who were in distress."

It thus appears that before the close of the eighteenth century, the work of deaf-mute instruction had become fairly inaugurated on the continent of Europe and in the British Isles. It has been fully demonstrated that the deaf mute was an intelligent being; that his infirmity brought upon him,



not mental imbecility, but an ignorance which could be in good part removed. The obligation was also acknowledged by governments and by christian men, to alleviate and remove the disability that bore so heavily upon him.

While in Europe, deaf mutes had thus excited general sympathy, and means were being provided for their instruction, in this country their condition had scarcely attracted attention. A single exception to this remark requires a brief mention.

In the year 1812, in the family of Col. William Bowling, of Goochland county, Virginia, were three deaf mute children. The reputation of the school at Edinburgh had already reached this country, and a brother and sister of Col. Bowling had been sent there for education in 1795. John Braidwood, grandson of Thomas, was induced by the liberal offers of Col. Bowling, to come across the sea to undertake the education of his children and establish a permanent school. He soon fell into dissipated habits and the scheme proved a failure.

The first Institution for deaf mutes on this continent, as is well-known, was opened at Hartford, on the 15th of April, 1817. The circumstances which led to its establishment, are too recent and familiar to require recital here. The desire of a prominent physician of that city to secure the education of a daughter, led to the founding of a school which was at first thought to be sufficient to educate all the deaf mutes of the country. A little inquiry, however, revealed the magnitude of the need, and other schools soon followed. The Institution at New York was opened in 1818; that in Pennsylvania in 1822; the one in Kentucky in 1823, and this in Ohio in 1829. From the original fountain, a noble stream has gone forth, bearing the blessings of education to all the deaf-mutes of the country. The duty to care for them has been willingly accepted, and there is now scarcely a State in our widely extended domain that does not offer to them the opportunity of instruction.

In the rapid view we have taken of the interest which deaf-mutes have excited in the world, I have refrained from commenting upon the peculiar methods that have been adopted to gain access to their minds and secure their development. I will now give to these a few moment's attention.

We have seen that the infirmity of the deaf-mute bears upon him in two directions. It cuts him off from intercourse with his fellows, and leaves him in profound ignorance, by closing up from his mind the avenues of knowledge. No system of education is of value to him that does not bring relief in these two particulars. It must give him the means of easy and rapid intercourse with others, and it must open his mind to the sources of information. How this can best be done, is a problem which has been long and carefully studied by many able minds, and its solution attempted by two widely different methods.

Nearly all the early efforts to educate the deaf and dumb, proceeded on one theory, viz: that speech is essential to thought; that the mind can only attach ideas to vocal sounds, and that, consequently, all ideas must necessa-

rily be communicated through this medium. This theory seems to reach back to the first communication of language to man by his Creator, and supposes that God gave man, by speech, the means of acquiring all the knowledge he is capable of receiving.

The earliest and most distinguished advocates of this theory, was John Conrad Amman a Swiss physician, who, in 1690, published an able work in support of his views. Amman ascribed to spoken language a mysterious and almost divine power. "In the human voice," he says, "may be said to dwell the very essence of life. The voice is a distinct emanation of that immortal spirit which God breathed into the nostrils of man when he created him a living soul. Among the immense number of gifts of God to man, it is speech, in which eminently shines forth the imprint of divinity. In like manner as the Almighty created all things by his word, so he gave to man, not only in appropriate language, to celebrate worthily his author, but further, to produce by speech whatever he desires, in conformity with the laws of his existence."

Heinicke drank his inspiration from the work of Amman, and embraced essentially his theories. To his mind, also, "it was the voice which showed forth the glory of God's gift to man. It was speech only which fully comprehended, contained and expressed the movements of the soul. Every other means of communication was dead." Views so extravagant, would naturally soon be materially modified by thinking men, yet, we find that, even to the present day, while no one will confess his acceptance of such absurd notions, their general influence is widely felt in the efforts made to restore this lost faculty to the deaf mute.

With regard to the vital point in this theory, that ideas can only be communicated by vocal speech, it is proper to say that it is a baseless and wholly erroneous assumption. Vocal sounds, so far from being the only basis or medium of thought, are simply the conventional and arbitrary representatives of ideas. They convey no meaning whatever to the mind, in the first instance, but must be explained by some other means, before they have any significance or power of suggestion. What idea do you obtain from the sound of a word, in a foreign language, which you do not understand? No amount of repetition will make it intelligible to you. The sound you recognize, but it must have an interpreter before it can convey ideas to your mind. To the deaf mute, the case is still worse. It should never be forgotten, that by the loss of hearing, his relation to vocal language is entirely changed. To him words have no existence; he hears them not. No vibrations fall upon his palsied nerves, and no art or theory can change this essential fact of his experience. Vocal language is abnormal to him. Sounds do not address the eye, which, in his case, must perform the duty of the ear. He only sees the rapid motion of the organs which produce the sounds, and these, difficult as they are to distinguish, must be interpreted to him by some medium of which his eye takes cognizance. No substitution of other words or sounds will avail, for, as already remarked, these have no existence to him as sounds, and no meaning as words. What, therefore, must you do



in teaching a deaf mute to speak? You impose upon him two most difficult tasks. He must first distinguish by the movement of the vocal organs, rapid and scarcely perceptible as they are, the words that are spoken. These *must* be explained to him, in the first instance, by significant signs. When he comes to understand the words and their meaning, he must learn to arrange his own organs in the way to produce, not some uncertain sound, but precisely those demanded by the combination of letters that compose the word.

Suppose you who speak, were reduced to this method of communication in your family circle, making no sounds and using only the lips. You understand the meaning of language, and know what to say, and this, with the deaf mute, is two-thirds of the battle. You will find, however, on the experiment, that you must be near the person addressed, who must concentrate upon you his profound and painful attention, that you can usually speak to but one person at a time, that your conversation must be confined to familiar subjects, or those which lie within a very limited range, that frequent repetition will be inevitable, and that you must enunciate your words with careful and tedious deliberation. You will be specially fortunate, if with all these restrictions, you are able to make out, here and there a word of the sentence addressed to you, from which you may guess the rest. If, in addition, you were to have the utterance of sounds which have no ear to modulate or guide them, you would soon be inclined to raise the inquiry whether there might not be some other more intelligible and agreeable method of communication.

There is a better method, a language that appeals directly to the perceptive faculties of the deaf mute, and needs no process of translation to make it understood. It is the language of signs, or of pantomime.

The language of pantomime is common to man in all ages, and in all states of civilization. It is invariably resorted to by voyagers, in conversing with the natives of newly discovered countries, and is universally understood. The Rev. William C. Woodbridge, an eminent scholar, and a former teacher of the deaf and dumb, affirms that he has seen this language employed in intelligent conversation with an Indian, a Chinese, a Sandwich Islander, and with deaf mutes from England, Scotland, Germany, France Italy and Switzerland. A native of the Sandwich Islands, visiting the Asylum in Hartford, gave an account of his early life, which was fully comprehended by the pupils. Some years since, when the Amistad Africans were in Hartford, waiting a judicial trial, they were visited by Dr. Gallaudet, at that time the Principal of the Asylum. He found himself able to converse with them freely, and drew from them the particulars of their country, their families and the incidents of their early life. The Indians in our western territories are divided into many distinct tribes, speaking different dialects yet they easily hold converse with each other by a common language of pantomime. Many of these signs are identical with those used by deaf and dumb, and a bright mute would find no difficulty in conversing with them on ordinary subjects.

The definiteness and copiousness of the language of signs will, of course, vary with the intelligence of those who use it. All language is a creature of society, rather than of individual life, and is expanded and refined by use and the wants of men. The language of signs, as employed by deaf mutes in an Institution, and by the cultivated men who make it the medium of their instruction, is capable of indefinite expansion, and of expressing all ideas that can be expressed by articulate sounds. It has the great advantage of grouping together several ideas, and representing them at once before the mind, as a painting, which in language must be expressed. In simple narratives, and in depicting the emotions, signs are far more expressive than words, and they also surpass them in the rapidity of communication on common subjects. You would be much more interested in the story of the boy stealing the old man's apples, if represented in graphic signs, than if related in words. A description of Niagara, the tumultuous rush of the seething waters, the awful plunge, the clouds of spray, pictured to the eye in expressive pantomime, is far more impressive than if given in written or spoken words. So the countenance beaming with love, kindling with expectation, glowing with admiration, scowling with hatred, or flashed with anger, describes these feelings much more vividly than the simple words used to represent them can do. Contrast, too, the clasp of affection with the impassive phrase that affirms its existence, or the glare of defiance with the strongest expression of such feelings in language. How tame would be the conversation of the Frenchman and the Italian without the accompanying gesticulation! Compare the eloquent periods of the advocate, when delivered with forcible and appropriate action, with the same words pronounced with a frigid countenance and an immobile person, or the expressive pantomime of the tragedian, with the same language either spoken or written, without this accompaniment, and you will recognize something of the power of significant gesticulation in the common intercourse of society. By means of the sign language, social worship is conducted in all our Institutions, and is exceedingly effective. The beautiful narratives of the Scriptures, and the truths of Divine revelation, can thus be brought clearly to the comprehension and to the interested attention of the deaf mute. The events of history, the facts of science, the theories and teachings of philosophy, can be as clearly presented to them by this expressive medium, as they can to hearing persons by oral speech.

The learned Jerome Cardan, Professor in the University of Padua, first announced this principle, upon which alone the education of the deaf mute can be successfully accomplished. Cardan thus expresses himself: "Writing is associated with speech, and speech with thought; but written characters and ideas may be connected together without the intervention of sounds, as in hieroglyphics. If sounds are not essential to render written characters intelligible, no more are they to explain gestures or signs." It is not known that Cardan put his principle, so important and so distinctly brought out, to the test of practical experiment.

The Abbe De l'Epee, when at the age of sixteen, received from his tutor

the same principle. It profoundly impressed his mind, and he afterward made it the basis of his system of instruction. The Abbe states it in the following terms: "There is no more natural and necessary connection between abstract ideas, and articulate sounds which strike the ear, than there is between the same ideas, and the written characters which address the eye." It seems surpassingly strange that so simple a principle, and one so constantly proved by observation and experience, should not earlier have been put to practical use, and stranger still that it should ever have been denied. It was sharply disputed, however, by the cotemporaries of De l'Epee, who, were the champions of articulation, and was considered by them a philosophical heresy. De l'Epee demonstrated the truth of his proposition by the best possible evidence, that of successful experiment.

But written characters require an interpreter to the deaf mute as well as sounds; how shall they be made intelligible to him? How shall he know the meaning of written language? The Abbe soon came to the conclusion that the best instrument for explaining it, was the natural language of the deaf mute himself—that of pantomime—and that this, corrected, enlarged and perfected by a skillful hand, would prove adequate to interpret written words, and to express every shade of thought. The development and application of this principle by De l'Epee was the crowning glory of his life, and for this, his name will be embalmed in grateful remembrance as long as, among the generations of men, there shall be found one whose eye must perform the service of the ear.

The experience of a hundred years in this branch of education has happily brought all practical teachers into substantial agreement, with respect to the indispensable value of signs in developing the mind of the deaf mute, in explaining words, and in communicating facts. Even the most strenuous advocates for articulation as an aid to the mute in his intercourse with society, give their emphatic testimony to their worth and necessity in this regard. For his social enjoyment they are equally indispensable. It is as cruel as unwise, to deprive a mute child, in a family or in a school, of the pleasure and aid of his own beautiful and graphic language, and to compel him to express his ideas and wants in the, to him, unnatural, distasteful and unmeaning form of words, which he cannot understand, till they are explained to him. The fact, on the one hand, which the most enthusiastic advocate of articulation must admit, that the highest attainment of articulate speech, when it is made the medium or the end of education, can only give to a comparatively small proportion of deaf mutes a slow, tedious, uncertain means of communication with hearing persons, on a limited range of themes, and on the other, that signs give the power to address them when assembled in companies, of conducting social worship (which is entirely impracticable by articulate speech), and of educating *all* who are afflicted with deafness, should, aside from other considerations, have some weight in deciding the comparative merits of the two systems we have discussed.

Theories apart, no one can dispute that by means of signs, thousands of deaf mutes, relieved in a great measure from their disability, have been re-

stored to their friends and society, and not a few have risen to eminence as men of genius and culture. It is also worthy of special remark, that not a solitary instance has appeared in history, of a congenital mute, educated by articulation, who has risen to any prominence. The fact has also some significance, that the most successful articulators of whom the world has heard, have resorted to other methods of communication in intercourse with their familiar friends. Saboureaux de Fontenai, the favorite pupil of Pereira, who was a cotemporary of De l'Epee, was exhibited before the Academy of Sciences at Paris, for his ability to articulate, yet he was in the habit of conversing with his friends by spelling and writing. Lowe, the celebrated pupil of Dr. Watson, and a deaf mute barrister of London, informed Dr. Peet that his usual mode of communication with his family was by the fingers, and with strangers by writing. The practical value of articulation as a means of easy communication with hearing persons, is revealed by such facts more forcibly than theory can do, and it would seem to prove that it gives but a slight return for the immense labor it costs to acquire it.

Although, as already intimated, the introduction of deaf-mute instruction into this country, dates something more than fifty years after its permanent establishment in Europe, yet the work has been here most intelligently and successfully pursued. We have taken hold of this great interest with the good sense and practical wisdom which is characteristic of our people. In several particulars, I think, we may claim for our Institutions a pre-eminence over those of any other country in the world.

**REPORT**  
**OF THE**  
**JOINT COMMITTEE**  
**OF THE**  
**EIGHTEENTH GENERAL ASSEMBLY**  
**OF THE**  
**STATE OF IOWA,**  
**APPOINTED TO VISIT THE**  
**INSTITUTION FOR THE DEAF AND DUMB,**  
**LOCATED AT**  
**COUNCIL BLUFFS.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**



## REPORT.

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TO THE EIGHTEENTH GENERAL ASSEMBLY OF THE STATE OF IOWA:

YOUR joint committee, appointed to visit the Institution for the Deaf and Dumb, have made a careful examination of its condition and management, and submit the following report:

The main building has been substantially completed, and of the \$40,000 appropriated therefor, by the Seventeenth General Assembly, only \$34,322.92 has been expended in its construction. It has been built in pursuance of the original design, which provided for another wing, and it is not now in all respects as convenient as could be desired. With the building as now constructed, we are unable to see how any more judicious arrangements can be made for the convenience of all concerned than such as now exist.

We deem it unfortunate, that the girls are now compelled to occupy the fifth floor for sleeping apartments, but until the east wing is rebuilt it will be impracticable to remedy this inconvenience without causing a greater one. We understand that the east wing can be rebuilt, and the whole Institution completed as contemplated in the original design, at a cost not exceeding \$30,000.

The building is supplied with water and gas, and warmed by steam.

In case of fire, there are provisions for water, with suitable hose upon each floor in both the main building and wing, and arrangements have also been made so that in case of fire upon any floor of the main building the occupants can escape through the wing. Fire escapes are also provided for the main building which are accessible from each floor.

Portions of the walls of the east wing are still standing, and its foundations are probably as good as before the fire.

The west wing is now used for study and recitation rooms, and sleeping apartments for the boys. There is in this wing one large room, now used as a study and recitation room, which is not provided with sufficient heating apparatus to make it warm and comfortable in the coldest weather. We are of the opinion that this difficulty can be remedied by the use of "storm," or double windows, and that such change should be made. The room, however, in its present condition, can be kept comfortable except during the coldest weather when the wind is strong from the west or north. The main building is supplied with sufficient heating facilities, except, that possibly, some of the large rooms on the north may need larger or additional radiators.

There is a basement, a short distance from the main building, in which are two large boilers now used for heating the buildings. It seems to have been the design to build upon, or above this basement a building for laundry purposes. This, we understand, can be done at a cost not exceeding \$5,500. This building should be completed as soon as practicable. As now arranged there is a boiler with pumps in the brick workshop for the purpose of supplying water for the reservoir and hot water for laundry purposes. Such change should be made so as to have this work all done in the basement, by means of which the services of one man could be dispensed with and a large saving made in the fuel account.

From examination made in compliance with your instructions, your committee are of the opinion that the appropriations made by the last General Assembly have been wisely and economically expended; that they have been expended for the objects for which they were appropriated; that there has been no indebtedness contracted in excess of the appropriations made for said institution, and that there has been no diversion of money from the specific purpose for which it was drawn out of the State treasury.

Your committee would commend the treasurer, Mr. Stubenrauch, for the business-like and systematic manner in which he has kept his accounts with the institution.

Exhibit "A" hereto attached and made a part hereof contains a list of the names of the persons employed, the purpose for which



employed, and the amount which each one receives for his or her services. The employes receive no other or greater salary than is shown in said exhibit.

Your committee have given especial consideration to the complaints which have been made regarding the diet, and care of the children, and the general charges of mismanagement. We have taken the testimony, under oath, of several persons, both in and out of the institution, some of whom have made complaints and others of whom were not especially friendly to the present management, and we are led to believe that the quantity of food furnished has been ample, and that the quality and variety have been equal to if not superior to that enjoyed by a majority of the children of the State. One of the teachers who had been connected with similar institutions in New York and Michigan stated that "the food provided our children compares well with, and I am inclined to think is better than that furnished in similar institutions in other States." The bread is furnished by a baker in Council Bluffs who stated under oath that he provided them with the same kind that he furnished to his city customers, that he used the best spring or winter wheat flour and that he never adulterated it with alum.

The bedding is of good quality and sufficient in quantity. The Assistant Matron informed us, under oath, that she had always been able to supply all demands for extra bedding.

For a time the gas furnished was of such poor quality that there was just cause for complaint. This was owing to the inefficiency of the person employed in the gas house; but this difficulty has been fully overcome and the gas now manufactured is good in quality and ample to furnish good and abundant light for all necessary purposes.

The range now in use is in a broken and dilapidated condition and should at once be exchanged for a new one.

The grounds about the buildings are at present in an unattractive condition. Some effort should be made to improve and beautify them, and the surroundings of these unfortunate children should be made more pleasant and attractive.

As a rule we believe that the teachers and matrons are faithful and zealous in the discharge of their duties. They seem to fully

realize the importance of their respective positions, and they labor with an enthusiasm seldom seen in our public schools.

For some time the school was without an articulation teacher; but one has recently been employed, and is already at work.

The children seem to be healthy, happy and contented. They are eager to learn and seem to make the best use of their opportunities. Their progress, in the acquisition of knowledge, is all that the most sanguine could expect.

Concerning the management of the institution, your Committee are frank to suggest that they believe that the Superintendent has not hitherto been sufficiently self-reliant and decisive in proposing and enforcing such rules and regulations as are desirable for the government of an institution of this character. We are constrained to believe that if he had displayed more self-reliance and firmness in asserting his opinions and conclusions, and more vigor and boldness in carrying them forward, his relations with the teachers and pupils would have been quite as pleasant and his usefulness increased. His position has been by no means an enviable one. He assumed control of the institution as the representative of a new order of things—the master of a period of economy and retrenchment. It was very natural for the teachers and pupils to refuse to heartily indorse the new system of economy, and equally natural that they should not be pre-prejudiced in favor of the representatives of this change of management.

When he took his present position he was not familiar with the habits and characteristics of this class of children, nor with the general management of institutions of this character. He had good grounds for believing that the friends of the old management, both in and out of the institution, did not deem it a religious duty to aid and assist him in his efforts to obtain a knowledge of the wants of the institution, and a favorable standing with the teachers and children. Under such circumstances it is quite probable that he has been inclined to be cautious and timid in the exercise of his authority. A bold and confident use of his powers, without submitting to the conflicting counsels of others, would have made his position easier to himself and better for all concerned.

We are informed and believe that as he becomes more familiar with the wants and needs of the institution he assumes more respon-

sibility, and is more confident and determined in the exercise of his authority. He has been uniformly kind and pleasant in his dealings with the teachers and children.

There is nothing harsh or tyrannical in his nature, and while he is at the head of the institution parents may rest assured that he will not permit their children to suffer for want of the comforts of life; nor will he allow them to be subjected to cruelty or ill treatment at the hands of others.

Some months ago the sewer was found to be defective, and, until repaired, its gases escaped into some of the rooms of the main building. We could not make such an examination as would enable us to speak with certainty, but we feel that it is quite probable that a new sewer will be required, or that at least considerable work will have to be done upon the old one before the meeting of the next General Assembly.

We therefore recommend an appropriation not exceeding \$1,000, to be used if, in the judgment of the Trustees that amount, or any part thereof, shall be needed to furnish a new sewer or repair the old one. We also recommend that there be appropriated for a new range, \$500; for improving the grounds, \$500; for building the laundry house and changing the boilers and pump, \$6,000; and for the teachers and official incumbents, \$11,000. The increase in the last-named fund is made necessary by the large increase in the number of scholars and the necessity for additional teachers.

All of which is respectfully submitted.

J. J. RUSSELL,  
J. F. GREENLEE,  
*Of the Senate.*

L. B. WADLEIGH,  
A. L. BEACH,  
N. S. HORNADAY,  
*Of the House.*

## EXHIBIT "A."

Moses Folsom, Superintendent, \$800 per annum, with board and washing for himself, wife and child.

J. A. Kennedy, teacher for nine months, \$650, board and washing.

Mrs. J. A. Kennedy, temporary teacher, \$30 per month, board and washing.

C. S. Zorbaugh, teacher, for nine months, \$675 and house rent.

Edwin Southwick, teacher, nine months, \$500 and board.

James Simpson, teacher, nine months, \$500 and board.

M. B. Southwick, teacher, nine months, \$300 and board.

Margaret Pollock, teacher, nine months, \$350 and board.

F. C. Holloway, teacher, nine months, \$450 and board.

Helen White, teacher, nine months, \$180 and board.

F. C. Booth, teacher, nine months, \$450 and board,

S. E. Wright, matron, yearly, \$400 and board.

E. Willard, assistant matron, yearly, \$300 and board.

Peter West, boys' supervisor, monthly, \$30 and board.

A. Darnell, pumping engineer, monthly, \$25, board and house rent.

A. Nevin, watchman, monthly, \$25, board and house rent.

W. S. Wilkins, gasmaker, monthly, \$30, board and house rent.

W. B. Heath, shoemaker, monthly, \$25, board and house rent.

J. Neven, heating engineer, monthly, \$40.

C. H. W. Brown, foreman broom and carpenter shop, monthly, \$50.

F. Gall, kitchen boy, monthly, \$10 and board.

R. C. Williams, barn man, monthly, \$25.

M. S. Coe, seamstress, monthly, \$16.66 and board.

M. E. Parsons, nurse, monthly, \$16.66 and board.

Kate Harrington, pantry girl, monthly, \$15 and board.

Hattie Henderson, cook, monthly, \$20 and board.

Delia Hill, ironer, weekly, \$3 and board.

Hannah Devine, assistant cook, weekly, \$3 and board.

Nettie Oleson, laundry, weekly, \$3 and board.

Christina Oleson, laundry, weekly, \$3 and board.

Mary Starkey, laundry, weekly, \$3 and board.

Julia Hande, laundry, monthly, \$7 and board.

Emma Kirkendall, kitchen girl, weekly, \$2 and board.

Christina Christensen, hall girl, weekly, \$2.50 and board.

Nettie Lawson, hall girl, weekly, \$2.50 and board.

Annie Lanning, hall girl, weekly, \$2.50 and board.

Lizzie Bathurst, dining room, weekly, \$3 and board.

Matilda Anderson, dining room, weekly, \$3 and board.

Jennie Van Tassell, articulation teacher, monthly, \$45 and board.

Lights, washing and fuel are furnished to nearly all of the teachers and employees.

FOURTEENTH BIENNIAL REPORT

OF THE

IOWA COLLEGE FOR THE BLIND,

LOCATED AT VINTON, BENTON COUNTY,

TO THE

EIGHTEENTH GENERAL ASSEMBLY.

OCTOBER, 1879.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



## OFFICERS.

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### TRUSTEES.

HON. JEREMIAH L. GAY, *President.*

HON. SAMUEL H. WATSON, *Treasurer.*

HON. P. F. STURGIS.

HON. JACOB SPRINGER.

HON. M. H. WESTBROOK.

HON. GEORGE MOREHOUSE.

# FACULTY.

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## PRINCIPAL.

REV. ROBERT CAROTHERS, A. M.

## MATRON.

MRS. EMELINE E. CAROTHERS.

---

THOMAS F. McCUNE, A.B.,

*Assistant Principal and Teacher,  
Rhetoric, Logic, Chemistry, Geology, Civil Government,  
English and American Literature.*

MISS GRACE A. HILL,

*Grammar, Analysis, General History, Zoology, Penmanship.*

R. M. CAROTHERS,

*Mental and Moral Philosophy, Geography, and Music Reader.*

GEO. W. TANNEHILL,

*Mathematics.*

MRS. LUCY JAMES,

*Physiology, Natural Philosophy, Arithmetic, Geography.*

MISS LORANA MATTICE,

*Second Primary.*



Miss HATTIE BLACKMAN,

*First Primary.*

T. S. SLAUGHTER,

*Musical Director.*

G. W. B. SMALLEY,

*Assistant Music Teacher.*

Mrs. KITTY CISNA,

*Assistant Music Teacher.*

## WORK DEPARTMENT.

---

MISS ELLEN HAMILTON,

*Sewing Machine.*

LORANA MATTICE,

*Bead and Fancy Work.*

HATTIE BLACKMAN,

*Cane-Seating.*

JOHN CISNA,

*Broom-Making.*

GEORGE KRAUS,

*Mattress and Basket.*

PHYSICIAN.

C. C. GRIFFIN, M. D.,

## TRUSTEES' REPORT.

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TO THE HONORABLE THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

The undersigned Trustees would respectfully submit the following as their Report of the management of the Iowa College for the Blind for the biennial term ending the 30th day of September, A. D. 1879.

Owing to the reduction made by the Seventeenth General Assembly in the appropriations for the running expenses of the institution, embarrassment at first ensued, but notwithstanding this, your Trustees are gratified to be able to state that the two years covered by this report have been years of marked prosperity in the history of the College. The school is well and thoroughly organized, with a full corps of competent and most faithful officers and teachers. The pupils are excellently disciplined, are contented and happy, and have made rapid progress in their studies. Their general appearance indicates neatness and cleanliness.

The College buildings, as well as all the other buildings on or about the premises, are kept scrupulously clean; neatness and general cleanliness and healthfulness pervade every department; and good order is everywhere visible about the entire institution.

The official reports of the Principal and Treasurer are herewith submitted, to which your attention is invited, as showing in detail the educational and financial condition of the institution.

The finances of the institution have been faithfully and carefully managed, and its receipts, together with the appropriations, have been, by adopting the most rigid economy in every department, sufficient to meet the current expenses.

We desire to call the attention of your honorable body to the necessity of removing the old ceilings in the main building and replacing them with new ones. The plastering has become detached from the laths, and is constantly dropping to the floor, thereby causing great danger to the inmates. The ceilings can be removed and replaced

with new ones at a cost of \$600; and it is the judgment of your Trustees that it would be economy to appropriate this amount, and not continue any longer the old practice of patching, which is expensive, and disfigures the building without removing the danger. Two of our steam boilers have been in constant service for nine years, and are now beginning to show very evident signs of needing general repairs, and for this purpose we would ask an appropriation of \$1,000.

We also renew our application for the following appropriations asked in our last report:

For iron fence .....	\$4,000
For cattle-barn and hog-house .....	1,000

The fence in front of the College buildings is in a dilapidated condition, and very much disfigures the beauty of the grounds, and should at once be replaced. As a substantial foundation for an iron fence is already laid, it would in our judgment be wisdom to place thereon a neat and substantial iron structure. There is also great need for a suitable barn of sufficient capacity to contain the necessary hay, straw and grain, and to furnish adequate stabling for the milch cows. As our hogs are a source of considerable income, we deem it of the highest importance that a suitable building should be provided for their care.

We recognize with gratitude the encouragement and support which the institution has received from the State in the past, and we solicit for the future that kind and careful consideration, and liberal appropriations, without which its object and aim *cannot* be accomplished. Through it the blessings of education and the means of supporting themselves are furnished to a large number of deeply afflicted but worthy and deserving persons, who, without the benefits thus afforded, would be helpless and wretched.

Respectfully submitted.

JEREMIAH L. GAY, *President.*  
 SAMUEL H. WATSON, *Treasurer.*  
 P. T. STURGIS,  
 JACOB SPRINGER,  
 M. H. WESTBROOK,  
 GEORGE MOREHOUSE.

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## REPORT OF THE PRINCIPAL.

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REPORT OF THE PRINCIPAL.

To His Excellency, JOHN H. GEAR, Governor of Iowa:

In compliance with the law of the State, I herewith submit the Fourteenth Biennial Report of the Iowa College for the Blind for the biennial term ending September 30, 1879. During the first year of this biennial term we enrolled 120 pupils, and had an average attendance of 110; and during the second year we enrolled 112, and had an average attendance of 103, giving an average for the two years of 106½.

In the following table you will find the names, age at admission, sex, residence, place of nativity, cause of blindness, and date of admission of the pupils in attendance during the period embraced in this report:

STATISTICS OF PUPILS ENROLLED.

NAME.	No.	RESIDENCE-COUNTY.	NATIVITY.	CAUSE OF BLINDNESS.	HOW LONG BLIND AT AD-MISSION.	DATE OF AD-MISSION.
Edward Broderick.....	19	Polk.....	Illinois.....	Accident.....	Four months.....	July 1, 1871
Wm. A. Bushong.....	23	Mahaska.....	Iowa.....	Staphylocoma.....	Three years.....	Sept. 10, 1870
Herbert L. Chase.....	10	Winneshiek.....	Iowa.....	Congenital.....	Ten years.....	Sept. 7, 1875
Richard J. Carner.....	25	Clayton.....	Maine.....	Scarlet fever.....	Twenty years.....	Nov. 7, 1878
Bernard Daldrup.....	16	Winneshiek.....	Germany.....	Strong medicine.....	Eleven years.....	Sept. 2, 1878
Andrew J. Davis.....	15	Lucas.....	Iowa.....	Measles.....	Fourteen years.....	Sept. 1, 1876
Frank Duncan.....	8	Shelby.....	Iowa.....	Congenital.....	Eight years.....	Sept. 30, 1875
Alonzo R. Eastman.....	11	Black Hawk.....	Iowa.....	Accident.....	One year.....	April 1, 1873
Levi L. Elliott.....	22	Story.....	Indiana.....	Inflammation.....	Four years.....	Sept. 1, 1874
Osoff Erickson.....	11	Mitchell.....	Illinois.....	Cataract.....	Ten years.....	March 20, 1877
Ashbel C. Ferrey.....	16	Clinton.....	New York.....	Cataract.....	Six years.....	Sept. 22, 1866
Reuben K. Graham.....	12	Tama.....	Pennsylvania.....	Opacity.....	Six years.....	Jan. 15, 1870
Thomas A. Guthrie.....	14	Cedar.....	Iowa.....	Congenital.....	Fourteen years.....	Sept. 20, 1876
Robert Hackingberry.....	13	Black Hawk.....	Pennsylvania.....	Scrofula.....	Ten years.....	Nov. 24, 1877



STATISTICS OF PUPILS—CONTINUED.

NAME.	RESIDENCE—COUNTY.	NATIVITY.	CAUSE OF BLINDNESS.	HOW LONG BLIND AT AD- MISSION.	DATE OF AD- MISSION.
Franklin White	13 Polk	Iowa	Quackery.	Ten years.	Sept. 17, 1878
Daniel M. Wiseman	15 Mitchell	Minnesota	Whooping cough.	Ten years.	Jan. 1, 1878
Zachary T. Winders	28 Washington	Ohio.	Ophthalmia	One years.	March 26, 1878
James H. Yount	9 Benton	Iowa	Spotted fever.	Two years.	Sep. 1, 1874
Lizzie Adair	9 Decatur	Iowa	Fever.	Nine years.	Nov. 13, 1872
Mahala S. Adams	16 Benton	Indiana	Scarlet fever.	Seven years.	Sept. 8, 1878
Mary J. Albaugh	18 Adams	Iowa	Scrofula.	Thirteen years.	Sept. 4, 1871
Anna M. Bailey	16 Polk	Switzerland	Small pox.	Thirteen years.	Sept. 23, 1868
Kate Pauline Baker	17 Des Moines	Connecticut	Injury on head.	Ten years.	Sept. 16, 1879
Frankie E. Barnes	17 Scott	Iowa	Inflammation.	Seven years.	Sept. 24, 1875
Isabella Bebout	22 Fremont	Ohio.	Unknown	Eight years.	Sept. 5, 1877
Anna Behrens	9 Scott	Iowa	Cataract	Seven years.	Oct. 30, 1877
Mary Bell Bism	10 Poweshiek	Virginia	Accident.	Six years.	Sept. 27, 1871
Elmira J. Breece	19 Monroe	Iowa	Inflammation.	Ten years.	Dec. 12, 1877
Alice Dora Brewer	16 Washington	Iowa	Inflammation.	Six years.	Oct. 6, 1874
Rosella Brewer	13 Washington	Iowa	Inflammation.	Two years.	Sept. 18, 1875
Alma F. Brown	14 Franklin	Iowa	Unknown	Three years.	Sept. 6, 1877
Katie Carter	11 Polk	Iowa	Scrofula	Three years.	Nov. 2, 1872
Agnes L. Cassels	16 Dakota Territory	Indiana	Scrofula	Twelve years.	Sept. 13, 1873
Martha Cassels	9 Dakota Territory	Indiana	Scrofula	Seven years.	Sept. 13, 1873
Jennie M. Clary	17 Linn	Pennsylvania	Neuralgia.	Eight years.	Oct. 26, 1866
Joanna R. Coppock	15 Warren	Iowa	Brain fever.	Fourteen years.	Sept. 17, 1879
Anna M. Coulter	16 Washington	Iowa	Staphyloma	Four years.	Sept. 25, 1877
Mary A. DeGeyso	19 Black Hawk	Illinois.	Quackery.	Ten years.	Oct. 1, 1877
Anna Dillon	15 Lee	Iowa	Small pox.	Seven years.	Sept. 2, 1873
Lillie C. Dix	17 Linn	Iowa	Inflammation	Three years.	Jan. 19, 1875
Millicie Downs	8 Linn	Iowa	Scrofula	Three years.	April 16, 1869
Nannie Duncan	12 Shelby	Iowa	Congenital	Twelve years.	Sept. 30, 1875
Ada E. Fairchild	15 Linn	Iowa	Paralysis	Eight years.	Sept. 14, 1877
Lillian B. Fearing	13 Scott	Iowa	Accident.	Seven years.	May 7, 1877
Emma Frehley	Benton	Unknown	Unknown	Unknown	April 19, 1877



Nellie A. Getchell.	17	Delaware	Iowa	Congenital	Seventeen yrs	Sept.	5, 1877
Mary Grant.	13	Carroll	Illinois	Scarlet fever.	Ten years.	April	17, 1872
Labbie Guthrie	15	Cedar	Pennsylvania	Congenital	Fifteen years	Jan.	5, 1869
Lou Hardin.	15	Winnebick	New York	Inflammation.	Four years.	Nov.	4, 1868
Mary E. Harter	27	Appanoose	Ohio	Inflammation of brain.	Two years.	Sept.	13, 1876
Hannah E. Hiler	12	Johnson	Iowa	Inflammation.	Two years.	Oct.	31, 1872
Phalla M. Hinckley	16	Ringgold	Iowa	Congenital	Sixteen years.	Sept.	19, 1877
Mary L. Hines	13	Iowa	Pennsylvania	Congenital	Thirteen years.	Sept.	20, 1875
Mary Blanche Howard	11	Hamilton	Iowa	Cataract	Ten years.	Sept.	12, 1878
Adelia M. Hoyt.	14	Black Hawk	Iowa	Unknown	Seven years.	Sept.	17, 1879
Jennie Inbody.	9	Linn	Indiana	Inflammation.	Four years.	Nov.	1866
Aleinda C. Jones.	13	Davis	Iowa	Anaurosis	Eight years.	Sept.	11, 1871
Marv Anzusta Jov.	8	Clayton	Iowa	Opacity	Five years.	March	20, 1867
	20	Polk	Iowa	Congenital	Twenty years.	Sept.	1876
	19	Van Buren	Iowa	Inflammation.	(One year.	Sept.	8, 1868
	13	Jackson	Iowa	Measles.	Four years.	March	14, 1878
Minerva Lemaster.	16	Lee	Iowa	Unknown	Ten years.	Sept.	19, 1876
Christine Lemberg	8	Benton	Prussia	Congenital	Eight years.	Dec.	30, 1868
Anna Little	18	Jasper	Pennsylvania	Inflammation.	Ten years.	Sept.	29, 1871
Emma Magoon	11	Iowa	Iowa	Inflammation.	Four years.	Sept.	2, 1873
Kittie Meisner.	9	Hamilton	Wisconsin	Inflammation.	From infancy.	Sept.	3, 1873
Matilda Mericle.	15	Tama	Ohio	Scrofula	Thirteen years.	Sept.	8, 1873
Martha E. Miller	19	Keokuk	Iowa	Strong medicine.	Twelve years.	Sept.	6, 1877
Rena A. Miller	16	Woodbury	Missouri	Ophthalmia.	Nine years.	Nov.	1876
Nannie E. Monarch	14	Jasper	Illinois	Fever	Nine years.	Nov.	2, 1870
Clara Embree Montgomery	12	Muscatine	Iowa	Unknown	Unknown	Sept.	1875
Amanda M. Page.	30	Linn	Ohio	Scrofula	Twenty-six yrs.	Jan.	16, 1875
Anna C. Peterson	10	Scott	Germany.	Small pox.	Seven years	May	1872
Anna Pike	20	Boone	Georgia	Inflammation.	Five years.	Nov.	10, 1875
Hattie Bell Pratt	17	Sac.	Wisconsin	Measles.	Fourteen years.	Sept.	1, 1874
Maryetta Rath	6	Linn	Iowa	Inflammation.	From infancy.	Sept.	15, 1863
Phebe S. Riley	9	Harrison	Iowa	Spotted fever.	Six years	Sept.	11, 1871
Hattie Ritchhart.	13	Polk	Iowa	Unknown	From infancy.	Oct.	12, 1878
C. Adel Roan.	17	Cedar	Iowa	Inflammation.	Three years.	Sept.	17, 1879
Bessie Ross.	18	Louisa.	Indiana	Inflammation.	Twelve years	Jan.	14, 1871
Orpha R. L. Ross	16	Louisa.	Illinois.	Whooping cough.	Eight years.	Oct.	27, 1877
Margaret Ryan.	23	Webster	New York.	Ophthalmia.	Eight years	Sept.	5, 1876
Laura A. Shinn	8	Decatur	Iowa	Scarlet fever	Four years.	Sept.	9, 1867

STATISTICS OF PUPILS—Continued.

NAME.	RESIDENCE-COUNTY.	NATIVITY.	CAUSE OF BLINDNESS.	HOW LONG		DATE OF AD- MISSION.
				BLIND AT AD- MISSION.		
Julia A. Smith.	9 Tama.	Iowa.	Unknown.	One year.	Sept.	16, 1879
Ella Stevens.	15 Benton	Iowa.	Accident.	Three years.	Sept.	5, 1877
Melissa M. Starkey.	12 Shelby.	Iowa.	Inflammation.	Ten years.	Dec.	12, 1874
Alice Endora Stroud.	13 Adams.	Wisconsin.	Inflammation.	Six years.	Aug.	31, 1870
Clara M. Tannehill.	6 Marion.	Iowa.	Inflammation.	Two years.	Sept.	5, 1876
Ada M. Trulock.	9 Des Moines.	Iowa.	Inflammation.	Three years.	Sept.	6, 1879
Nellie Van Hooser.	7 Mitchell.	Iowa.	Inflammation.	From infancy.	Sept.	16, 1872
Mary C. Walters.	11 Guthrie.	Illinois.	Congenital.	Eleven years.	Oct.	23, 1873
Almeda Weatherly.	10 Grundy.	Iowa.	Scrofula.	Eight years.	Sept.	1, 1874
Eva Bell Wood.	10 Pocahontas.	Iowa.	Scrofula.	Two years.	Jan.	5, 1876
Ella M. Woolsey.	14 Winneshiek.	Iowa.	Inflammation.	Seven years.	Sept.	5, 1874
Sarah E. Wright.	14 Clinton.	Iowa.	Inflammation.	From infancy.	Jan.	23, 1878

INDUSTRIAL DEPARTMENT.

Henry Bender.	43 Buchanan.	Ohio.	Cataract.	Two years.	Jan.	1877
Charles Edson.	50 Clinton.	Canada.	Inflammation.	Fourteen years.	Oct.	4, 1878
Joseph Hartley.	36 Dubuque.	Pennsylvania.	Fever.		Oct.	30, 1869
William Laven.	24 Polk.	Ireland.	Inflammation.	Three years.	Jan.	30, 1872
Charles Miller.	25 Iowa.	Iowa.	Cataract.	Three years.	Sept.	30, 1876
Lewis Shaffer.	32 Jefferson.	Bavaria.	Cataract.	Six years.	Sept.	7, 1872
Eliphallet Winn.	30 Muscatine.	Ohio.	Inflammation.	Four years.	May	6, 1872
Paulina Simmons.	30 Page.	Indiana.	Measles.	One year.	Dec.	10, 1874

## COURSE OF INSTRUCTION.

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The following gives the course of instruction and the classification of pupils:

### FIRST PRIMARY.

Raised Print,  
Arithmetic.

Spelling,  
Geography.

### SECOND PRIMARY.

Reading Raised Print,  
New York Point.  
Spelling.

Arithmetic,  
Geography,  
History.

### INTERMEDIATE.

Reading Raised Print.  
Spelling.

Arithmetic,  
Geography,

U. S. History.

### JUNIOR DEPARTMENT.

#### FIRST YEAR.

Penmanship.  
Arithmetic,

Geography,  
Grammar.

#### SECOND YEAR.

Penmanship,  
Arithmetic.

Analysis and Parsing,  
General History.

#### THIRD YEAR.

Penmanship,  
Arithmetic,

Natural Philosophy,  
General History.

## SENIOR DEPARTMENT.

## FIRST YEAR.

Algebra,  
Rhetoric,

Physiology.  
Zoology.

## SECOND YEAR.

Algebra,  
Moral Philosophy,

Chemistry,  
Civil Government,  
American Literature.

## THIRD YEAR.

Geometry,  
Mental Philosophy,

Geology.  
Logic,  
English Literature.

## CLASSIFICATION.

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### THIRD SENIOR CLASS.

NAME.	RESIDENCE.
Mary Jane Albaugh,	<i>Prescott.</i>
Jennie M. Clary,	<i>Marion.</i>
Elizabeth Guthrie,	<i>Mechanicsville.</i>
Laura A. Shinn,	<i>Leon.</i>

### SECOND SENIOR CLASS.

Anna Bailey,	<i>Greenwood.</i>
Millie E. Downs,	<i>Walker.</i>
Mary Augusta Joy,	<i>Strawberry Point.</i>
Mary E. Ross,	<i>Columbus Junction.</i>
Ada M. Trulock,	<i>Burlington.</i>
Newton Nelson,	<i>Losh Mills.</i>
Benjamin G. Shaub,	<i>Keota.</i>

### FIRST SENIOR CLASS.

Frankie E. Barnes,	<i>Davenport.</i>
Mary Belle Bisom,	<i>Victor.</i>
Sarah Katie Carter,	<i>Polk City.</i>
Agnes L. Cassels,	<i>Central City, Dakota Ter.</i>
Anna C. Peterson,	<i>Maysville.</i>
Anna Z. Pike,	<i>Boone.</i>
Christine Lemberg,	<i>Vinton.</i>
Hattie Bell Pratt,	<i>Sac City.</i>
Phebe S. Riley,	<i>Mondamin.</i>
Ashbel C. Ferreby,	<i>Marion.</i>
Reuben K. Graham,	<i>Tama City.</i>
Gilbert T. Henderson,	<i>Braddyville.</i>

## SECOND JUNIOR CLASS.

Martha G. Cassels,	<i>Central City, Dakota Ter.</i>
Anna T. Dillon,	<i>Keokuk.</i>
Mary E. Harter,	<i>Centerville.</i>
Emma Magoon,	<i>Millersburg.</i>
Ella M. Woolsey,	<i>Ossian.</i>
Clara M. Tannehill,	<i>Knoxville.</i>
Andrew J. Davis,	<i>Belinda.</i>
John L. Morse,	<i>Osage.</i>
Robert D. Webster,	<i>Burlington.</i>

## FIRST JUNIOR CLASS.

Rosella Brewer,	<i>Lexington.</i>
Tillie C. Dix,	<i>Troy Mills.</i>
Nannie A. Duncan,	<i>Harlan.</i>
Lillian B. Fearing,	<i>Davenport.</i>
Lillie Mericle,	<i>Spring Creek.</i>
Maggie J. Ryan,	<i>Ft. Dodge.</i>
Alice Endora Stroud,	<i>Brooks.</i>
Alonzo R. Eastman,	<i>Cedar Valley.</i>
John W. Hohn,	<i>Algona.</i>
Charles C. Lemberg,	<i>Shellsburg.</i>
Conrad M. Meyer,	<i>Vermillion, Dakota Territory.</i>
James W. Pifer,	<i>Center Point.</i>

## IRREGULARS.

Alice D. Brewer,	<i>Lexington.</i>
Emma F. Kannedy,	<i>Des Moines.</i>
Nannie E. Monarch,	<i>Colfax.</i>
Maryetta Rath,	<i>Marion.</i>
Carpenter M. Scott,	<i>Prairie Hill.</i>

## INTERMEDIATE.

Isabella Bebout,  
Alice Miller,  
Amanda M. Page,  
Melissa M. Starkie,  
Ella Stevens,  
Thomas A. Guthrie,  
Herman Hodam,  
James H. Leebrick,  
Franklin Redington,  
William C. Motz,  
Henry Shrope,

*Eastport.*  
*Sioux City.*  
*Palo.*  
*Shelby.*  
*Vinton.*  
*Mechanicsville.*  
*Corn Valley.*  
*Burlington.*  
*Paul.*  
*Modale.*  
*Mechanicsville.*

## SECOND PRIMARY.

Alma F. Brown,  
Elmira J. Breece,  
Anna M. Coulter,  
Mary A. De Geyso,  
Mary E. Grant,  
Ada E. Fairchild,  
Phalla M. Hinckley,  
Minerva Lemaster,  
Kittie J. Meisner,  
Hattie Ritchhart,  
Nellie M. Van Hooser,  
Almeda Weatherly,  
Frank Duncan,  
Osoff Erickson,  
Horace Hinckley,  
Samuel Kauffman,  
William Arthur Kortz,  
Willie B. F. Morey,  
James A. Muirhead,  
Frank Motz,  
Frank White,  
James H. Yount,

*Maysville.*  
*Albia.*  
*Washington.*  
*Cedar Rapids.*  
*Arcadia.*  
*Troy Mills.*  
*Caledonia.*  
*Vincennes.*  
*Webster City.*  
*Des Moines.*  
*Rock Creek.*  
*Grundy Center.*  
*Harlan.*  
*St. Ansgar.*  
*Caledonia.*  
*Amish.*  
*Des Moines.*  
*Gilbert.*  
*Traer.*  
*Modale.*  
*Des Moines.*  
*Belle Plaine.*

## FIRST PRIMARY.

Mahala S. Adams,	<i>Vinton.</i>
Anna Behrens,	<i>Davenport.</i>
Mary Blanche Howard,	<i>Webster City.</i>
Mary L. Hines,	<i>Millersburg.</i>
Minnie M. Lampson,	<i>Andrew.</i>
Martha E. Miller,	<i>Sigourney.</i>
Clara E. Montgomery,	<i>Muscatine.</i>
Sarah E. Wright,	<i>Oxford Junction.</i>
Eva Bell Wood,	<i>Rolf.</i>
Herbert L. Chase,	<i>Freeport.</i>
Bernard L. Daldrup,	<i>Festina.</i>
Isaac W. Johnson,	<i>Manson.</i>
William Peterson,	<i>St. Ansgar.</i>
Peter Peterson,	<i>St. Ansgar.</i>
Myron Shaw,	<i>Essex.</i>
Frederick Schillar,	<i>Ida.</i>

The school is also divided into four classes for reading, and one hour each evening is spent in reading history, travels, biography, &c.

Besides the regular spelling exercises in the class-rooms, the school is divided into three classes, and one hour each Saturday is spent in spelling exercises.

There are two literary societies in active operation, in which the pupils take a deep interest, and by which they are greatly benefited. One hour each Sabbath is devoted to the study of the Scriptures.

## MUSICAL DEPARTMENT.

This department is under the direction of Prof. T. S. Slaughter, a graduate of this institution and a gentleman of very extended musical acquisition, and a thorough disciplinarian. He is assisted by Prof. Smalley and Mrs. Cisna, both of whom were former pupils in the institution.

Prof. Smalley is one of the finest violinists in the State, and his connection with the College has given fresh inspiration to this feature of the department.



The following is a summary of the number of pupils in the musical department:

Harmony .....	110
. Vocal music .....	97
Organ .....	4
Piano.....	106
Violin .....	47
Guitar .....	17
Flute .....	14
Horns .....	11
Clarionet.....	11
Orchestra .....	19
Brass band .....	9

INDUSTRIAL DEPARTMENT.

BROOMS.

Broom-making is the most practical trade taught, and has therefore received special attention. The following statement exhibits the financial condition of this department from November 6, 1877, to September 30, 1879:

Brooms and materials on hand November 6, 1877..	\$ 150.27	
Materials purchased since .....	630.39	
Freight on same .....	76.98	
Paid for work in shop .....	142.25	
		\$ 999.89
Receipts from sale of brooms .....	1,129.93	
Brooms and materials on hand September 30, 1879..	187.74	
		1,317.67

MATTRESS.

The mattress department has received more attention than formerly. The following statement shows what has been done:

Materials purchased.....	\$136.42	
Receipts from sales .....	\$232.95	
Materials on hand September 30, 1879 .....	40.00	
		272.95

BEAD-WORK.

Materials on hand November 6, 1877.....	\$ 60.00	
Materials purchased since.....	68.85	
		\$128.85
Receipts from sales .....	117.81	
Material and work on hand September 30, 1879 .....	50.36	
		168.17

CANE-SEATING.

It is very important that the pupils should be instructed in this department, but it has not been self-sustaining from the fact that there has been but little demand in this locality for such work. We have expended for material, \$29.90, and have received for work, \$10.35.

WILLOW WORK.

This is a new enterprise, and gives evidence of success; but in this department, as in the cane-seating, the expense at present is greater than the receipts. We have expended for willows, \$24.15, and have received for work sold, \$7.20.

SEWING.

This department is very successful, and is a very important feature in the education of blind girls. A knowledge of the sewing machine and its management, will be to them not only a source of pleasure, but of profit. In this department we manufacture all the sheets, pillow-slips, comforts, towels, etc., needed in the institution, besides many articles of clothing.

The great aim in each department is to afford instruction that is thoroughly practical and that will help the pupils to help themselves.

The teachers in the various departments, have all been prompt and faithful in the discharge of their duties, and the success attained is due to their constant and self-denying efforts.

The pupils, in general, have conducted themselves with propriety, have been diligent in their studies, and have made commendable progress. A few were found to be unwilling to comply with the necessary regulations, and after all reasonable means had been exhausted, they were returned to their homes.

We have had but few cases of serious sickness, and have been entirely free from any epidemic.

The ranks of both teachers and pupils have been invaded by death. Of the teachers, Miss Mary McCutcheon, died June 6, 1878, and Miss Mary E. Carothers, who succeeded her, died June 19, 1879. Both were devoted, earnest, and eminently successful teachers. They were untiring and self-sacrificing in their efforts to instruct and elevate the pupils under their care. In their deaths the pupils have lost warm-hearted and devoted friends, and the institution teachers in the truest and highest sense.

Of the pupils, Jennie Inbody died at her home in Johnson county, April 29, 1878. Burritt Harger died at his home in Delaware county, April 30, 1879. Lizzie Adair died in the institution, June 13, 1879, and Alice Endora Stroud, died at her home in Adams county, Sept. 7, 1879.

The law provides that the county superintendents of common schools shall report annually to the superintendent of the College for the Blind the name, age, residence, and post-office address of every blind person and every person blind to such an extent as to be unable to acquire an education in the common schools, who reside in the county in which he is superintendent. This is our principal source of information in regard to blind persons proper to be admitted to the institution, and the information furnished is very unsatisfactory. The census report shows that there are very many more blind in the state than are reported by the county superintendents, and many of these are young and ought to be placed in the institution at once. Many of the reports sent in fail to give the names of the parents, and often the address is omitted, and as a matter of course, are valueless. Would it not be possible to devise some method by which a full and complete report of all the blind in the state could be obtained?

In conducting the interests of the institution, much embarrassment is often experienced, from the fact that the law does not limit the age at which persons may be admitted. Was it not the underlying principle in establishing this school for the blind, that it was but a branch of the public school system of the state? If so, would it not be proper, under ordinary circumstances, to confine its advantages to those within the school ages?

From the treasurer's report it will be seen that the finances of the institution have been wisely, judiciously, and economically administered.

At their meeting in April, 1878, the board of trustees decided that visitors to the institution, or persons attending any of the literary or musical entertainments given by the pupils, should be charged TEN

cents, and the money so collected be deposited with the treasurer of the college, and to be kept as an outfit fund for indigent pupils going out from the institution. In this way, \$81.72 have been collected, and out of this two young men have been furnished with broom machines; one costing \$30, and the other \$24.50, leaving a balance in the treasury of \$27.22.

The American Association of Instructors of the Blind, held their biennial meeting in the institution for the blind at Columbus, Ohio, in August, 1878. Representatives from this institution were present, and derived much benefit from the spirited and earnest discussions of questions relating to the proper education of the blind. The next meeting of the Association will be held in the Kentucky Institution for the Blind, at Louisville, in 1880.

The printing press purchased some years ago for the use of the institution, has proved a valuable acquisition to our equipments for educating the blind, as it enables us to put into their hands lesson leaves in the Point System, and thus furnishing them with text-books. During the past year we have utilized the press in another direction. By expending \$100.88 for seeing type, we have been enabled to do all our own printing. We have also issued a small monthly paper, entitled *THE MISTLETOE*, which carries to the homes of the pupils and to the county superintendents of common schools and to the press throughout the state, intelligence of our monthly progress.

Respectfully submitted.

ROBERT CAROTHERS, *Principal*.

## ACKNOWLEDGMENTS.

The following newspapers have been sent to the institution gratuitously during the whole or part of the last two years, for which the thanks of the principal, teachers and pupils are tendered to the proprietors, with the hope that the favor may be continued:

*Vinton Eagle,*  
*People's Journal,*  
*Benton County Herald,*  
*Belle Plaine Union,*  
*Belle Plaine Review,*  
*Schellsburg Record,*  
*Iowa State Press,*  
*Iowa South-West,*  
*Maquoketa Excelsior,*  
*Cedar Rapids Times,*  
*Linn County Pilot,*  
*Keokuk Post,*  
*Fontanelle Observer,*  
*Anamosa Eureka,*

*The Interior,*  
*The United Presbyterian,*  
*Marengo Republican,*  
*Missouri Valley Times,*  
*Muscatine Journal,*  
*Mount Pleasant Journal,*  
*Goodson Gazette,*  
*Deaf-Mute Mirror,*  
*Mutes' Companion,*  
*Nebraska Deaf-Mute Journal,*  
*Amateur News,*  
*The Aurora,*  
*The Tablet.*

We would also ask that the papers throughout the State and elsewhere would favor us, and as an exchange we will be glad to send the **MISTLETOE.**

## CONDENSED INVENTORY.

- 84 Beds and necessary clothing for the same.
- 30 Wash-stands, pitchers and bowls.
- 17 Bureaus.
- 35 Tables for pupils' rooms.
- 29 Wardrobes.
- 740 Chairs—400 of these for seating chapel.
- 8 16-foot dining-tables and table ware sufficient to furnish them.
- 1 Parlor set.
- 1 Reception-room set.
- Office furniture, consisting of 12 chairs, 1 large table, 4 cases.
- General library of 600 volumes.
- Raised-print library of 300 volumes.
- 3 Dissected maps.
- 1 Manikin.
- 3 Globes.
- 25 Braille tablets.
- 12 Pianos, most of them badly worn.
- 3 Organs.
- 1 Pipe organ.
- 15 Violins.
- 1 Bass viol.
- 2 Double bass.
- 10 Brass horns.
- 3 Clarionets.
- 2 Flutes.
- 1 Guitar.
- 1 Bass drum.
- 1 Tenor drum.
- 1 Pair cymbals.
- 1 Printing press and type.
- 4 Sewing machines.
- 1 Knitting machine.
- 5 Large broom machines.
- 8 Small broom machines.
- 4 Broom clamps.
- 2 Blacksmith's vises.
- 1 Set carpenter's tools.
- 1 Set steam-fitter's tools.
- 2 Tool chests.
- 1 Forge and anvil.
- 1 Tackle.
- 1 Washing machine and fixtures.
- 1 Mangle.
- 1 Laundry stove and irons.
- 40 Hogs.
- 5 Cows.
- 2 Horses.
- 3 Wagons.
- 1 Set bobs.
- 2 Sets harness.

## OFFICERS, TEACHERS, AND EMPLOYEES.

NAME.	OCCUPATION.	COM- PENSA- TION.
Robert Carothers...	Principal. ....	\$1,200
• Mrs. E. E. Carothers.	Matron.....	400
T. F. McCune.....	Assistant principal and teacher.....	600
Geo. W. Tannehill..	Teacher (boards out.).....	480
Grace A. Hill.....	Teacher .....	300
Mrs. Lucy James...	Teacher.....	260
Robert M. Carothers	Teacher and Music Reader.....	260
Lorana Mattice. ...	Teacher. ....	250
Hattie Blackman...	Teacher.....	200
T. S. Slaughter. ...	Musical director and teacher (boards out.).	1,000
G. W. B. Smalley...	Assistant music teacher.....	300
Mrs. Kitty Cisna...	Assistant music teacher. ....	92
John Cisna.....	Foreman in broom shop .....	350
Ellen Hamilton....	Teacher of sewing.....	150
George Kraus.....	Teacher of basket and mattress.....	100
James Sawyer.....	Asst. steward (takes breakfast in the inst.).	450
Robert Squires.....	Porter.....	240
R. E. Stevens.....	Engineer and carpenter (takes his meals in the institution.....	780
Dollie Morrison....	Nurse .....	200
Jennie Berry.....	Cook .....	200
Lucy Boyd.....	Asssistant cook, per month .....	15
Lizzie Linderman...	Chambermaid and care of small boys per month.....	15
Clara Swick .....	Visitors attendant and care of hall, per month.....	15
Ella Berry.....	Chambermaid, per month....	12
Esther Stevens....	Chambermaid, per month.....	12
Lizzie Lambert....	Dining-room, per month .....	12
Ida May.....	Dining-room, per month .....	12
Sallie Chambers....	Kitchen and dining-room, per month....	12
Pauline Simmons...	Dining-room, per month .....	5
Joseph Hartley....	Kitchen, per month.....	5
Maggie Wolfe.....	Laundry, per month .....	15
Bessie Rice.....	Laundry, per month .....	15
Mrs. A. Fisher.....	Seamstress, per month .....	15
.....	Chambermaid and general help, per month	12

## TREASURER'S REPORT.

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### SPECIAL APPROPRIATIONS.

#### SPECIAL APPROPRIATIONS OF THE SIXTEENTH GENERAL ASSEMBLY.

Balance on hand from last report:

For furniture, bedding and furnishing goods .....	\$707.52
For library and apparatus .....	\$337.20
Drawn from State treasury since, for library, &c.....	500.00
	————— 837.20
For musical instruments .....	143.16

Total balance.....\$1,687.88

#### SPECIAL APPROPRIATIONS OF THE SEVENTEENTH GENERAL ASSEMBLY.

For bedsteads, mattresses, bedding and chairs for pupils.....	\$1,000.00
For the repair of fences, stables, pens, including necessary materials.....	400.00
For contingent expenses .....	400.00
For constructing sewer .....	800.00
	—————
Total.....	\$2,600.00

### EXPENDITURES.

Of the balance on hand of the appropriations of the Sixteenth General Assembly we have expended, as shown by accompanying statement, for furniture, carpets and furnishing goods, \$593.39, leaving a balance still of \$114.13.

For library and apparatus we have expended \$786.99, leaving a balance of \$50.21.

For musical instruments we have expended \$140.57, leaving a balance of \$2.59.



Of the appropriations of the Seventeenth General Assembly, we have expended, as shown by the accompanying statement:

For bedsteads, mattresses, bedding and chairs for pupils, \$612.22, and as yet have drawn but \$500.

For constructing sewer we have expended \$645.26, leaving a balance of \$154.74.

For contingent expenses we have expended \$392.85, leaving a balance of \$7.15.

We would respectfully ask the General Assembly to transfer the unexpended balance for constructing sewer (\$154.74) to the current expense account of the institution.

Of the appropriation for the repair of fence, &c., we have expended nothing.

S. H. WATSON, *Treasurer.*





## CURRENT EXPENSE ACCOUNT.

1877.

## RECEIPTS.

Nov. 6. Balance in treasury.....\$ 815.07

Nov. 6. State appropriation..... 4,280.00

1878.

Jan. 3. State appropriation..... 2,000.00

Jan. 3. State appropriation (clothing account)..... 482.25

Feb. 5. State appropriation..... 4,480.00

Apr. 2. State appropriation..... 2,000.00

May 8. State appropriation..... 4,480.00

June 12. State appropriation..... 2,000.00

June 13. State appropriation (clothing account)..... 357.93

Aug. 6. State appropriation..... 3,960.00

Oct. 1. State appropriation..... 2,000.00

Nov. 5. State appropriation..... 3,600.00

1879.

Jan. 7. State appropriation..... 2,000.00

Jan. 7. State appropriation (clothing account)..... 287.96

Feb. 4. State appropriation..... 3,780.00

Apr. 1. State appropriation..... 2,000.00

May 6. State appropriation..... 3,600.00

June 18. State appropriation..... 2,000.00

June 18. State appropriation (clothing account)..... 216.90

Aug. 5. State appropriation..... 3,420.00

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47,760.11

Interest on State warrants..... 698.86

Sale of brooms..... 1.129.93

Sale of bead work..... 117.81

From sewing department..... 248.24

From sale of hogs..... 786.01

From sale of cows..... 318.23

Tuition from pupils from Dakota Territory..... 1,128.00

From mattress department..... 190.25

Cane seating and basket making..... 17.55

Sundries..... 313.54

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4,948.42

Total receipts.....

52,708.53

Total expenditures.....

47,428.77

Balance in treasury.....

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\$5,279.76S. H. WATSON, *Treasurer.*

1877.

## EXPENDITURES

Dec.	4.	By orders for November.....	1,870.89
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1878.

Jan.	3.	By orders for December.....	4,553.51
Feb.	5.	By orders for January.....	2,246.04
March	5.	By orders for February....	1,914.15
Apr.	3.	By orders for March.....	3,381.00
May	7.	By orders for April.....	1,990.87
June	12.	By orders for May and half of June.....	4,365.50
Aug.	6.	By orders for half of June and July.....	957.72
Sept.	3.	By orders for August.....	1,228.74
Oct.	1.	By orders for September .....	2,150.04
Nov.	5.	By orders for October.....	1,432.49
Dec.	3.	By orders for November.....	2,310.64

1879.

Jan.	7.	By orders for December .....	3,634.31
Feb.	4.	By orders for January.....	1,819.00
March	4.	By orders for February.....	1,581.06
Apr.	1.	By orders for March... ..	2,663.41
May	6.	By orders for April.....	1,577.54
June	17.	By orders for May and half of June.....	3,406.13
Aug.	5.	By orders for half of June and July.....	792.86
Sept.	2.	By orders for August.....	1,100.88
Oct.	7.	By orders for September.....	2,451.99

Total expenditures.....	\$47,428.77
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S. H. WATSON, *Treasurer.*

## SCHEDULE OF EXPENDITURES

*Of the Iowa College for the Blind*

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1877.				
Dec.	4	1 D. Stick & Son.....	Apples and groceries .....	\$ 149.00
Dec.	4	2 Amsden & Furry.....	Bread.....	119.51
Dec.	4	3 Brown & Bro .....	Meat.....	105.81
Dec.	4	4 P. W. Watson & Co.....	Apples and vinegar.....	108.50
Dec.	4	5 W. M. Loree .....	Groceries.....	74.97
Dec.	4	6 J. Z. Moyer .....	Meat.....	67.47
Dec.	4	7 R. H. Quinn .....	Groceries.....	54.98
Dec.	4	8 Williams & Young.....	Coffee, &c.....	47.80
Dec.	4	9 Al. & Will. Boggs .....	Sugar and butter.....	46.84
Dec.	4	10 E. H. Clark .....	Butter.....	43.80
Dec.	4	11 A. Rose.....	Butter and sugar.....	39.13
Dec.	4	12 A. Reeder .....	Milk .....	23.15
Dec.	4	13 James B. Souders.....	Sour-kROUT and pickles .....	22.75
Dec.	4	14 G. M. Gregg.....	Butter.....	17.40
Dec.	4	15 J. S. Brubaker.....	Medicines .....	15.58
Dec.	4	16 George Horridge & Co .....	Hardware .....	15.52
Dec.	4	17 J. W. Butler & Co. ....	Dry goods and groceries.....	14.67
Dec.	4	18 J. F. Young .....	Bird case.....	12.50
Dec.	4	19 Porter & Fulton.....	Stove and hardware .....	12.37
Dec.	4	20 C. R. Wilkinson & Co.....	Envelops and labels .....	10.50
Dec.	4	21 Boyles & Bechtel.....	Crackers.....	9.76
Dec.	4	22 Rich & Murphy .....	Bill-heads.....	9.75
Dec.	4	23 W. B. Reynolds.....	Pump.....	9.50
Dec.	4	24 M. D. L. Webb.....	Oat meal .....	7.95
Dec.	4	25 Eddy Bros. ....	Dry goods .....	7.61
Dec.	4	26 T. S. Palmer.....	Drugs.....	7.53
Dec.	4	27 Jervis & Kirk.....	Dry Goods .....	7.35
Dec.	4	28 N. C. Shugars .....	Butter.....	6.00
Dec.	4	29 J. P. Matthews .....	Flour .....	5.70
Dec.	4	30 F. R. Raiyea.....	Violin strings and repair'g inst.	5.27
Dec.	4	31 Vinton Musical Association....	Admission of pupils to concert..	5.00
Dec.	4	32 Bills & Mount.....	Clock and repairs... ..	4.50
Dec.	4	33 H. N. Palmer .....	Books .....	4.20
Dec.	4	34 H. E. Warner.....	Turnips.....	3.80
Dec.	4	35 M. Stern .....	Germantown yarn .....	2.35
Dec.	4	36 George Kimball.....	Sweet potatoes.....	1.87
Dec.	4	37 H. Wilcox .....	Express charges .....	1.05
Dec.	4	38 T. S. Slaughter.....	Salary .....	80.00
Dec.	4	39 Labor account.....	Wages of employes.....	836.20
Dec.	4	40 Robert Carothers.....	Traveling expenses to D. Moines	16.00
Dec.	4	41 A. S. Chadbourne & Co.....	Coal.....	88.37
Dec.	4	42 A. S. Chadbourne & Co.....	Coal.....	58.40
Dec.	4	43 A. S. Chadbourne & Co.....	Coal.....	67.32
Dec.	4	44 Henry Bumer.....	Potatoes.....	37.50
Dec.	4	45 S. H. Watson .....	Dry goods.....	30.07
Dec.	4	46 Rouse, Dean & Co .....	Small tank.....	25.00
Dec.	4	47 B., C. R. & N. R. R.....	Freight.....	2.97
Dec.	4	48 Jacob Springer .....	Services as Trustee .....	15.00
Dec.	4	49 J. L. Gay.....	Services as Trustee.....	10.00
Dec.	4	50 S. H. Watson .....	Services as Trustee .....	5.00
			Total.....	\$ 1,570.89
1878.				
Jan.	3	51 Labor account.....	Wages of employes.....	367.70
Jan.	3	52 Robert Carothers.....	Salary .....	300.00
Jan.	3	53 E. E. Carothers.....	Salary .....	100.00
Jan.	3	54 S. O. Spencer.....	Salary .....	240.00
Jan.	3	55 T. F. McCune .....	Salary .....	180.00
Jan.	3	56 John Cisna .....	Salary .....	120.00
Jan.	3	57 Grace A. Hill .....	Salary .....	105.00
Jan.	3	58 C. A. Spencer .....	Salary .....	90.00
Jan.	3	59 Mary Baker.....	Salary .....	90.00
Jan.	3	60 C. R. Miller .....	Salary .....	90.00
Jan.	3	61 Loranna Mattice.....	Salary .....	90.00
Jan.	3	62 T. S. Slaughter.....	Salary .....	80.00
Jan.	3	63 Mary McCutcheon.....	Salary .....	72.00

SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
Jan.	3	64 H. C. Harger .....	Salary .....	\$ 72.00
Jan.	3	65 George Kraus .....	Salary .....	80.00
Jan.	3	66 M. Meredith, M. D.....	Salary .....	79.25
Jan.	3	67 A. M. Butz .....	Improvements on grounds .....	300.00
Jan.	3	68 A. S. Chadbourne & Co .....	Coal .....	192.86
Jan.	3	69 A. S. Chadbourne & Co .....	Coal .....	108.78
Jan.	3	70 A. S. Chadbourne & Co .....	Coal .....	66.16
Jan.	3	71 Brown & Bro .....	Meat .....	182.90
Jan.	3	72 S. H. Watson & Sons .....	Interest .....	169.75
Jan.	3	73 Amsden & Furry .....	Bread .....	112.21
Jan.	3	74 E. H. Clark .....	Butter....	54.55
Jan.	3	75 P. W. Watson & Co .....	Groceries .....	46.19
Jan.	3	76 Morill & Co .....	Soap .....	42.92
Jan.	3	77 R. H. Quinn .....	Groceries .....	41.51
Jan.	3	78 S. H. Watson .....	Carpets .....	34.88
Jan.	3	79 J. F. Young .....	Flour and feed .....	34.72
Jan.	3	80 Boyles & Bechtel .....	Crackers.....	31.34
Jan.	3	81 W. M. Loree .....	Groceries .....	28.00
Jan.	3	82 A. Reeder .....	Milk....	26.20
Jan.	3	83 G. M. Gregg .....	Butter.....	20.00
Jan.	3	84 Al & Will Boggs.. .....	Groceries.....	16.09
Jan.	3	85 D. Stick & Son .....	Groceries .....	15.60
Jan.	3	86 A. Rose.....	Groceries .....	13.82
Jan.	3	87 Williams & Young.....	Groceries .....	11.35
Jan.	3	88 T. S. Palmer.....	Drugs .....	11.00
Jan.	3	89 Rich & Murphy.....	Printing .....	9.10
Jan.	3	90 J. S. Brubaker .....	Medicines.....	7.70
Jan.	3	91 C. R. Wilkinson & Co .....	Printing .....	7.50
Jan.	3	92 Samuel Angst .....	Lime .....	7.50
Jan.	3	93 B. C. R. & N. R. R.....	Freight .....	7.08
Jan.	3	94 F. R. Ralyea .....	Music and violin strings.....	6.46
Jan.	3	95 L. Gould & Co .....	Broom wire.....	6.31
Jan.	3	96 H. E. Warner .....	Turnips .....	6.20
Jan.	3	97 J. P. Matthews .....	Groceries .....	5.12
Jan.	3	98 W. S. Jackson .....	Corn .....	4.76
Jan.	3	99 Porter & Fulton .....	Hardware .....	4.69
Jan.	3	100 H. Wilcox.....	Subscription, <i>Harper's Magazine</i> .....	3.60
Jan.	3	101 H. Wilcox.....	Expressage .....	2.95
Jan.	3	102 Frank Emmings .....	Filing Saws. ....	2.50
Jan.	3	103 N. Y. School Journal .....	Subscription.....	2.50
Jan.	3	104 Doan & Taylor .....	Oysters .....	2.00
Jan.	3	105 George Horridge & Co .....	Hardware .....	1.95
Jan.	3	106 Charles Edson .....	Work in shop .....	25.25
Jan.	3	107 Louis Shaffer .....	Work in shop .....	8.75
Jan.	3	108 Jervis & Kirk .....	Dry goods .....	4.41
Jan.	3	109 A. S. Chadbourne & Co .....	Coal. ....	113.42
Jan.	2	110 A. S. Chadbourne & Co .....	Lumber .....	8.24
Jan.	3	111 J. L. Gay .....	Services as trustee .....	14.20
Jan.	3	112 Jacob Springer.....	Services as trustee .....	23.80
Jan.	3	113 C. Flint.....	Services as trustee .....	31.00
Jan.	3	114 P. Sturgis .....	Services as trustee .....	35.00
Jan.	3	115 H. C. Platt.....	Services as trustee and Com. w'k .....	53.00
Jan.	3	116 S. H. Watson .....	Services as trustee .....	5.00
Jan.	3	117 S. H. Watson .....	Pupils' clothing.....	305.90
Jan.	3	118 Israel Bros.....	Pupils' clothing.....	62.70
Jan.	3	119 M. Stern .....	Pupils' clothing.....	113.65
			Total .....	\$ 4,553.51
Feb.	5	120 Labor Account .....	Services of employes.....	\$ 364.20
Feb.	5	221 Brown & Bro .....	Meat .....	179.67
Feb.	5	122 Amsden & Furry .....	Bread and butter .....	110.07
Feb.	5	123 W. S. Jackson .....	Wood .....	100.00
Feb.	5	124 T. S. Slaughter .....	Salary .....	80.00
Feb.	5	125 P. W. Watson & Co .....	Groceries .....	75.88
Feb.	5	126 Z. B. Taylor.....	Broom material.....	54.61
Feb.	5	127 A. Rose.....	Groceries .....	46.82
Feb.	5	128 E. H. Clark .....	Butter.....	46.75
Feb.	5	129 Al & Will Boggs.....	Groceries .....	37.79

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
Feb.	5	180 W. M. Loree.....	Soap and groceries.....	\$ 85.22
Feb.	5	181 Williams & Young.....	Groceries.....	84.54
Feb.	5	182 D. Stick & Son.....	Groceries.....	82.11
Feb.	5	183 J. F. Young.....	Flour and shorts.....	80.08
Feb.	5	184 A. Reeder.....	Milk and straw.....	29.05
Feb.	5	185 Crane Bros. Manufacturing Co.	Pipe, elbows and tees.....	27.25
Feb.	5	186 R. H. Quinn.....	Groceries.....	22.88
Feb.	5	187 C. R. Wilkinson & Co.....	Printing and periodicals.....	21.85
Feb.	5	188 C. L. Qackinbush.....	Potatoes.....	21.00
Feb.	5	189 S. Grover.....	Corn.....	20.80
Feb.	5	140 Boyles & Bechtel.....	Crackers.....	20.54
Feb.	5	141 John Manwell.....	Butter.....	16.20
Feb.	5	142 G. M. Gregg.....	Butter.....	14.59
Feb.	5	143 J. S. Brubaker.....	Medicines.....	11.40
Feb.	5	144 I. N. Bunn.....	Admission of pupils to concert..	10.00
Feb.	5	145 Jervis & Kirk.....	Dry goods.....	8.19
Feb.	5	146 F. R. Ralysa.....	Violin strings and music.....	8.16
Feb.	5	147 John Ferguson.....	Plating spoons and forks.....	8.00
Feb.	5	148 T. S. Palmer.....	Medicines.....	7.00
Feb.	5	149 H. Wilcox.....	Express charges.....	6.40
Feb.	5	150 J. W. Rich.....	Postage.....	6.00
Feb.	5	151 E. Sayforth.....	Blacksmithing.....	5.60
Feb.	5	152 J. P. Matthews.....	Cheese and butter.....	4.67
Feb.	5	153 Porter & Fulton.....	Hardware.....	3.25
Feb.	5	154 Robert Squires.....	Services of bull.....	3.00
Feb.	5	155 Eddy Bros.....	Dry goods.....	2.80
Feb.	5	156 Geo. Horridge & Co.....	Hardware.....	2.75
Feb.	5	157 G. W. Webb.....	Whitewashing.....	2.50
Feb.	5	158 Doan & Taylor.....	Oysters.....	2.20
Feb.	5	159 M. Stern.....	Cotton yarn and drilling.....	1.98
Feb.	5	160 J. W. Rich, P. M.....	P. O. box rent.....	1.50
Feb.	5	161 Frank K. Emmings.....	Filing saws.....	1.50
Feb.	5	162 James Forbes.....	Husks.....	1.12
Feb.	5	163 Rich & Murphy.....	Cutting paper.....	1.00
Feb.	5	164 J. L. Gay.....	Two milch cows.....	67.55
Feb.	5	165 Chas. Smaltz.....	Corn.....	2.97
Feb.	5	166 A. S. Chadbourne & Co.....	Coal.....	115.63
Feb.	5	167 A. S. Chadbourne & Co.....	Coal.....	158.49
Feb.	5	168 A. S. Chadbourne & Co.....	Coal.....	182.75
Feb.	5	169 A. S. Chadbourne & Co.....	Coal.....	174.98
Feb.	5	170 Stickney Bros.....	Lumber.....	5.16
Feb.	5	171 Crane Bros. Manufacturing Co.	Pumps.....	6.85
Feb.	5	172 Foering & Co.....	Grate for laundry stove.....	4.20
Feb.	5	174 Barnum Bros.....	Beads.....	15.29
Feb.	5	175 H. Barnhart.....	Willows.....	6.55
Feb.	5	176 B., C. R. & N. R. R.....	Freight.....	14.81
Feb.	5	177 Jacob Springer.....	Services as Trustee.....	15.00
Feb.	5	178 S. H. Watson.....	Services as Trustee.....	5.00
			Total.....	\$ 2,246.04
March	5	179 Labor account.....	Wages of employes.....	\$ 348.80
March	5	180 Brown & Bro.....	Meat.....	127.02
March	5	181 J. Spangler.....	Wood.....	98.75
March	5	182 John L. Furry.....	Bread.....	88.45
March	5	183 T. S. Slaughter.....	Salary.....	80.00
March	5	184 W. M. Loree.....	Groceries.....	69.64
March	5	185 D. Stick & Son.....	Groceries.....	55.97
March	5	186 R. H. Quinn.....	Groceries.....	41.47
March	5	187 P. W. Watson & Co.....	Groceries.....	41.85
March	5	188 W. S. Jackson.....	Wood.....	40.00
March	5	189 E. H. Clark.....	Butter.....	36.50
March	5	190 Edwin Robinson.....	Cow.....	35.00
March	5	191 Williams & Young.....	Groceries.....	34.28
March	5	192 A. Reeder.....	Milk.....	22.80
March	5	193 G. M. Gregg.....	Butter.....	20.80
March	5	194 Boyles & Bechtel.....	Crackers.....	16.67
March	5	195 A. Rose.....	Groceries.....	13.96
March	5	196 J. S. Brubaker.....	Drugs.....	12.20
March	5	197 T. S. Palmer.....	Drugs.....	12.10



SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
March 5	198	Al. & Will. Boggs.....	Groceries.....	\$ 11.88
March 5	199	Kirk & Jervis.....	Dry goods.....	10.99
March 5	200	David Gingry.....	Potatoes.....	9.80
March 5	201	John Manwell.....	Butter.....	9.10
March 5	202	J. Dewalt.....	Potatoes.....	9.00
March 5	203	John Butterfield.....	Lard.....	6.90
March 5	204	Porter & Fulton.....	Hardware.....	6.80
March 5	205	F. R. Ralyea.....	Violin strings and clar'net reeds	5.58
March 5	206	Geo. Horridge & Co.....	Hardware.....	5.42
March 5	207	J. W. Butler & Co.....	Eggs, &c.....	5.35
March 5	208	J. P. Matthews.....	Eggs.....	5.02
March 5	209	Geo Kraus.....	Husks.....	5.00
March 5	210	Robert Carothers.....	Traveling expenses for pupils...	4.00
March 5	211	H. Wilcox.....	Express charges.....	3.10
March 5	212	A. D. Griffin.....	Medicines.....	2.50
March 5	213	Doan & Taylor.....	Oysters.....	2.15
March 5	214	M. Harriott.....	Parsnips.....	1.75
March 5	215	Frank Emmings.....	Filing saws.....	1.25
March 5	216	James Forbes.....	Husks.....	1.12
March 5	217	J. M. Davis.....	Lead pencils.....	1.00
March 5	218	H. Crawford.....	Corn.....	11.25
March 5	219	A. S. Chadbourne & Co.....	Coal.....	125.12
March 5	220	J. E. Stanton.....	Lumber.....	4.71
March 5	221	W. B. Wait.....	Braille slates.....	37.20
March 5	222	A. S. Chadbourne & Co.....	Coal.....	90.00
March 5	223	Morrill & Co.....	Soap.....	41.86
March 5	224	A. S. Chadbourne & Co.....	Coal.....	149.83
March 5	225	Crane Bros. Manufacturing Co.	Flue scraper.....	2.25
March 5	226	B., C. R. & N. R. R.....	Freights.....	19.86
March 5	227	Jacob Couts.....	Plastering.....	40.92
March 5	228	A. S. Chadbourne & Co.....	Coal.....	64.99
March 5	229	J. P. Klemine.....	Dry goods.....	5.55
March 5	230	Parrott, Gorton & Co.....	Blank order-book.....	12.00
March 5	231	Jacob Springer.....	Services as Trustee.....	15.00
March 5	232	S. H. Watson.....	Services as Trustee.....	5.00
March 5	233	G. W. Haines.....	Hay.....	2.84
			Total.....	\$ 1,914.15
April 2	234	Labor account.....	Wages of employes.....	\$ 867.50
April 2	235	Robert Carothers.....	Salary.....	800.00
April 2	236	E. E. Carothers.....	Salary.....	100.00
April 2	237	S. O. Spencer.....	Salary.....	240.00
April 2	238	T. F. McCune.....	Salary.....	180.00
April 2	239	John Cusna.....	Salary.....	120.00
April 2	240	Grace A. Hill.....	Salary.....	105.00
April 2	241	C. A. Spencer.....	Salary.....	90.00
April 2	242	C. R. Miller.....	Salary.....	90.00
April 2	243	Mary Baker.....	Salary.....	90.00
April 2	244	Lorana Mattice.....	Salary.....	90.00
April 2	245	T. S. Slaughter.....	Salary.....	80.00
April 2	246	H. C. Harger.....	Salary.....	72.00
April 2	247	Mary E. Carothers.....	Salary.....	72.00
April 2	248	George Kraus.....	Salary.....	80.00
April 2	249	Brown & Bro.....	Meat.....	186.74
April 2	250	John L. Furry.....	Bread.....	107.67
April 2	251	E. H. Clark.....	Butter.....	47.50
April 2	252	A. Rose.....	Groceries.....	42.96
April 2	253	P. W. Watson & Co.....	Groceries.....	42.45
April 2	254	Williams & Young.....	Fruit.....	80.4
April 2	255	W. M. Loree.....	Oil and groceries.....	28.60
April 2	256	Leonard Reed.....	Cow.....	27.00
April 2	257	D. Stick & Son.....	Groceries.....	24.21
April 2	258	Thomas Wright.....	Soap.....	23.75
April 2	259	J. F. Young.....	Flour and feed.....	23.32
April 2	260	R. H. Quinn.....	Groceries.....	22.58
April 2	261	Boyles & Bechtel.....	Crackers.....	21.31
April 2	262	Robert Carothers.....	Traveling expenses.....	18.00
April 2	263	Al. & Will. Boggs.....	Groceries.....	16.92
April 2	264	J. W. Butler & Co.....	Butter, &c.....	15.80

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
April	2	265 Rich & Murphy .....	Letter and bill-heads .....	\$ 14.85
April	2	266 Jervis & Kirk .....	Dry Goods .....	13.88
April	2	267 Charles Edson .....	Broom making .....	11.50
April	2	268 J. S. Brubaker .....	Medicines .....	11.15
April	2	269 G. M. Gregg .....	Butter .....	10.40
April	2	270 Vinton Musical Association....	Admission of pupils to concert.	10.00
April	2	271 Hannah Hiller .....	Assistant in bead-work .....	10.00
April	2	272 J. F. Young .....	Cane .....	8.80
April	2	273 George Horridge & Co .....	Repairing wringer. ....	7.50
April	2	274 T. S. Palmer .....	Drugs .....	7.35
April	2	275 Brown & Bro .....	Corn .....	6.48
April	2	276 A. Reeder .....	Milk .....	6.40
April	2	277 Robert Carothers .....	Traveling expenses for pupils ...	5.00
April	2	278 Spencer Johnson .....	Butter .....	4.69
April	2	279 W. D. Armstrong .....	Potatoes .....	2.87
April	2	280 Clarkson Bros .....	Subscription to <i>State Register</i> ...	2.50
April	2	281 Frank Emmings .....	Filing saws .....	1.75
April	2	232 M. Stern .....	Dry Goods .....	1.45
April	2	233 T. G. Haight .....	Repairing Harness .....	1.25
April	2	234 A. S. Chadbourne .....	Coal .....	108.92
April	2	235 A. S. Chadbourne .....	Coal .....	94.16
April	2	286 Z. B. Taylor .....	Broom material .....	76.41
April	2	287 Rouse, Dean & Co .....	H'ding tank and fire-door liners	45.44
April	2	288 A. P. H., for blind .....	Writing boards .....	4.00
April	2	289 Z. B. Taylor .....	Broom material .....	28.61
April	2	290 B., C. R. & N. R. R. ....	Freight .....	5.60
April	2	291 S. H. Watson & Sons .....	Interest .....	104.50
April	2	292 D. C. Backus .....	Tuning instruments .....	84.00
April	2	293 Jacob Springer .....	Traveling expenses .....	14.50
April	2	294 J. L. Gay .....	Services as trustee .....	14.20
April	2	295 Jacob Springer .....	Services as trustee .....	23.80
April	2	296 S. H. Watson .....	Services as trustee. ....	5.00
April	2	297 P. F. Sturgis .....	Services as trustee .....	85.00
			Total. ....	\$ 3,881.00
May	7	298 Labor account .....	Wages of employes .....	\$ 337.00
May	7	299 Brown & Bro .....	Meat .....	182.07
May	7	300 John L. Furry .....	Bread .....	105.84
May	7	301 E. H. Clark .....	Butter .....	77.10
May	7	302 P. Watson & Co .....	Groceries ..	68.08
May	7	303 W. S. Jackson .....	Wood .....	61.00
May	7	304 G. M. Gregg .....	Butter .....	51.40
May	7	305 Al. & Will. Boggs .....	Groceries .....	46.58
May	7	306 R. H. Quinn .....	Groceries .....	42.79
May	7	307 W. M. Loree ..	Groceries .....	40.67
May	7	308 D. Stick & Son .....	Groceries .....	40.23
May	7	309 Williams & Young .....	Groceries .....	87.51
May	7	310 Boyles & Bechtel .....	Crackers .....	30.41
May	7	311 John Manwell .....	Butter .....	26.80
May	7	312 Brown & Bro .....	Corn .....	24.19
May	7	313 J. P. Klemme .....	Maple sugar and ice cream .....	17.22
May	7	314 A. Rose .....	Groceries .....	11.40
May	7	315 F. R. Ralyea .....	Violin strings, etc .....	10.50
May	7	316 Henry Weben .....	Potatoes .....	10.50
May	7	317 H. S. Carroll & Co .....	Vinegar .....	10.31
May	7	318 J. S. Brubaker .....	Medicines .....	9.63
May	7	320 John Manwell .....	Butter .....	7.95
May	7	321 C. R. Wilkinson & Co. ....	Stationery .....	7.00
May	7	322 Henry Weben .....	Potatoes .....	6.80
May	7	323 E. C. Williams .....	Butter .....	6.10
May	7	324 Jervis & Kirk .....	Dry goods .....	5.68
May	7	325 Edward Seyfarth .....	Blacksmithing .....	4.85
May	7	326 Porter & Fulton .....	Hardware .....	4.66
May	7	327 T. S. Palmer .....	Medicines .....	4.00
May	7	328 James B. Souders .....	Vegetables .....	4.45
May	7	329 A. Reeder .....	Milk .....	4.10
May	7	330 H. Wilcox .....	Express charges .....	3.55
May	7	331 J. W. Rich ..	Postage .....	3.00

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
May 7	332	A. D. Griffin.	Medicines	2.00
May 7	333	A. S. Chadbourne & Co.	Coal	40.91
May 7	334	Cedar Falls Mattress Co.	Mattress wool	6.75
May 7	335	A. S. Chadbourne.	Coal	149.88
May 7	336	A. S. Chadbourne.	Coal	95.25
May 7	337	A. S. Chadbourne.	Coal	51.90
May 7	338	W. B. Walt.	Writing tablets	12.10
May 7	339	G. H. Wheeler.	Brandy and wines	20.50
May 7	340	J. E. Rounds	Exchange	3.50
May 7	341	S. H. Watson.	Stone	10.23
May 7	342	B. C. R. & N. R. H.	Freight	5.80
May 7	343	Rouse, Dean & Co.	Cistern covers	13.85
May 7	344	Leonard Reed.	Cutting stone for cistern	15.00
May 7	345	S. H. Watson & Sons	Interest	30.85
May 7	346	P. F. Sturgis.	Travelling expenses	21.00
May 7	347	T. S. Slaughter.	Salary	30.00
May 7	348	Geo. Morehouse	Services as trustee	25.20
May 7	349	J. L. Gay	Services as trustee	19.20
May 7	350	Jacob Springer	Services as trustee	28.80
May 7	351	P. F. Sturgis	Services as trustee	40.00
May 7		Abrook	Services as trustee	36.00
May 7		ion	Services as trustee	10.00
		Total		\$ 1,990.87
June 12		rothers	Salary to July 1, 1878.	\$ 901.00
June 12		there	Salary to July 1, 1878.	100.00
June 12		per	Salary	240.00
June 12		ice	Salary	180.00
June 12		hter	Salary	160.00
June 12		ll	Salary	120.00
June 12		ill	Salary	105.00
June 12		cer	Salary	90.00
June 12		aker.	Salary	90.00
June 12		rothers.	Salary	90.00
June 12		attice	Salary	90.00
June 12		okman	Salary	72.00
June 12		er.	Salary	72.00
June 12		us.	Salary	80.00
June 12		ingford	Assistant music teacher	91.00
June 12		unt	Wages of employes	523.00
June 12		ro	Meat.	161.50
June 12		urry	Bread	140.80
June 12		k	Butter.	62.55
June 12		son & Co.	Groceries.	56.25
June 12		ee.	Groceries.	47.83
June 12		10.	Groceries.	45.80
June 12		Boggs	Groceries.	41.14
June 12		schel	Crackers	33.90
June 12			Groceries.	33.44
June 12		Son	Groceries.	33.06
June 12		rs.	Vegetables	30.54
June 12		well	Butter	25.80
June 12		& Young	Fruits.	22.15
June 12		ter	Work in shop.	20.75
June 12		'right	Soap	18.75
June 12		ro	Corn	15.20
June 12		g	Butter.	15.00
June 12		Bros.	Leather cushion for wagon	13.00
June 12		rk	Dry goods.	12.58
June 12		1	Plants	10.00
June 12		ea	Violin strings, &c., &c.	9.80
June 12		er	Drugs.	7.92
June 12		aker	Drugs.	7.55
June 12		333 J. P. Klemme	Strawberries	5.04
June 12		334 Watson & Ravenscroft	Starch	4.75
June 12		335 Wm. Porterfield	Strawberries.	4.38
June 12		336 G. M. Gregg	Butter.	4.35
June 12		337 A. Reeder	Milk	4.10
June 12		338 Robert Squires	Service of bull.	3.00

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
June			Repairing	\$ 2.80
June		& Co.	Envelopes and printing	2.60
June			Filing saw	2.35
June			Needles and thread	1.65
June			Blacksmithing	1.20
June			Coal	90.00
June			Coal	51.96
June			Coal	43.80
June			Broom material	17.96
June			Freight	8.06
June			Hauling stone	1.00
June			Flour and shorts	26.12
June			Improvements on grounds	260.00
June			Exchange on warrants, etc	2.12
June			Salary	75.00
June			Traveling expenses for pupils	12.00
June			Services as trustee	41.40
June		Morehouse	Services as trustee	25.20
June		y	Services as trustee	19.20
June		pringer	Services as trustee	24.40
June		argle	Services as trustee	40.00
June		alson	Services as trustee	10.00
June		3	Pupils' clothing	109.00
June		rothers	Pupils' clothing	244.68
June		ebb	Pupils' clothing	1.70
			Total	\$ 4,865.50
Aug.		account	Wages of employees	\$ 305.32
Aug.		ark	Butter	156.30
Aug.		& Bro	Meat	50.67
Aug.		Furry	Bread	46.38
Aug.		J. Bouders	Vegetables	36.28
Aug.		Watson & Co.	Groceries	33.79
Aug.		er	Cutting and putting up hay	25.00
Aug.		i Reed	Cow	22.00
Aug.		oree	Groceries	20.85
Aug.		arker	Fruit	19.00
Aug.		& Son.	Groceries	17.09
Aug.		ninn	Groceries	15.21
Aug.		lkinson & Co	Printing	12.50
Aug.		& Bechtel	Crackers	11.57
Aug.		& Bro	Corn and oats	11.73
Aug.		et Winn	Removing night soil	10.00
Aug.		t Fulton	Hardware	8.40
Aug.			Potatoes	7.86
Aug.		mmme	Fruit	7.65
Aug.		is & Young	Groceries	7.10
Aug.		mer	Wall-paper and drugs	6.86
Aug.		ll. Boggs	Groceries	4.08
Aug.		mmings	Filing saws	3.75
Aug.		ch	P. O. box-rent	2.25
Aug.		obey	Fruit	23.21
Aug.		Wright	Soap	16.75
Aug.		Murphy	Printing	8.75
Aug.	5	453 M. W. Parker	Fruit	8.00
Aug.	0	454 M. H. Westbrook	Services as trustee	22.80
Aug.	6	455 Jacob Springer	Services as trustee	16.50
Aug.	6	456 S. H. Watson	Services as trustee	4.00
			Total	\$ 957.72
Sept.	3	457 Labor account	Wages of employees	\$ 207.62
Sept.	3	458 Z. B. Taylor	Broom material	60.86
Sept.	3	459 E. H. Clark	Butter	63.15
Sept.	3	460 R. H. Quinn	Groceries	35.06
Sept.	3	461 Brown & Bro	Meat	33.47
Sept.	3	462 Brown & Bro	Corn	28.00
Sept.	3	463 Thomas Wright	Soap	25.00

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1873.				
Sept. 3	461	John L. Furry	Bread	20.00
Sept. 3	463	D. Stick & Son	Groceries	17.85
Sept. 3	465	T. S. Palmer	Paints and oils	14.05
Sept. 3	467	E. H. Colcord	Vinegar and grapes	18.00
Sept. 3	468	Porter & Fulton	Hardware	12.88
Sept. 3	469	W. M. Loree	Groceries	12.80
Sept. 3	470	James B. Souders	Vegetables	11.17
Sept. 3	471	E. O. Williams	Potatoes	8.85
Sept. 3	472	A. Rose	Groceries	8.15
Sept. 3	473	J. W. Rich	Postage	7.00
Sept. 3	474	Geo. Horridge & Co.	Hardware	6.08
Sept. 3	475	A. L. & Will Boggs	Groceries	6.02
Sept. 3	476	Jervis & Kirk	Oil cloth	4.86
Sept. 3	477	Williams & Young	Fruit	4.60
Sept. 3	478	Boyles & Bechtel	Crackers and fruit	3.85
Sept. 3	479	R. W. Barker	Fruit	3.00
Sept. 3	480	Jos. S. Brubaker	Drugs	1.85
Sept. 3	481	Michael Linderman	Fruit	1.45
Sept. 3	482	J. P. Kleinme	Melons	1.80
Sept. 3	483	C. M. Glichrat	Repairing pump	1.00
Sept. 3	484	Robt. Carothers	Trav'g exp. to conv. at Columbus	46.20
Sept. 3	485	A. S. Chadbourne	Coal	389.80
Sept. 3	486	B. C. R. & N. R. H.	Freight	30.73
Sept. 3	487	A. H. Adams	Tea and coffee	81.00
Sept. 3	488	Crane Bro. Man'g Co.	Marble-top screen	26.57
Sept. 3	489	M. W. ...	Fruit	14.79
Sept. 3	490	... & Co.	Pumps	20.22
Sept. 3	491	... ock	Services as trustee	18.80
Sept. 3	492	... ST	Services as trustee	12.70
Sept. 3	493	...	Services as trustee	4.00
			Total	\$ 1,228.74
Oct. 1	514	W. M. Loree	Salary	\$ 800.00
Oct. 1	515	James B. Souders	Salary	75.00
Oct. 1	516	Geo. Horridge & Co.	Salary	75.00
Oct. 1	517	James Aust n.	Salary	100.00
Oct. 1	518	French & Fox	Salary	60.00
Oct. 1	519	Porter & Fulton	Salary	30.00
Oct. 1	520	D. Stick & Son	Salary	25.00
Oct. 1	521	A. Rose	Salary	25.00
Oct. 1	522	Jervis & Kirk	Salary	20.00
Oct. 1	523	E. H. Colcord	Salary	30.00
Oct. 1	524	Ir. C. Kimball	Salary	48.00
Oct. 1	525	Isband Noble	Salary	35.00
Oct. 1	526	Perrine & Taggart	Salary	10.00
Oct. 1	527	Henry Wiben	Salary	15.00
Oct. 1	528	Thomas Ridge	Wages of employes	817.25
Oct. 1	529	T. S. Palmer	Borghum	106.30
Oct. 1	530	John Duval	Meat	85.72
Oct. 1	531	F. H. Halyea	Bread	75.49
			Corn and oats	39.08
			Groceries and potatoes	88.50
			Groceries	28.05
			Vegetables	20.44
			Laundry wringer and hardware	25.48
			Cow	25.00
			Cow	24.00
			Hardware	18.01
			Groceries	17.95
			Oil and groceries	17.28
			Dry goods	16.28
			Grapes	15.30
			Borghum	14.85
			Apples and melons	12.88
			Groceries	11.73
			Potatoes	9.80
			Soup and vinegar	8.70
			Cement and stationery	8.80
			Apples	8.00
			Violin strings and bows	7.80

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
Oct.	1	532 Al. & Will. Boggs .....	Groceries .....	\$ 5.71
Oct.	1	533 Williams & Young .....	Apples and rice .....	5.50
Oct.	1	534 Boyles & Bechtel .....	Crackers .....	4.99
Oct.	1	535 E. Davis .....	Blacksmithing .....	4.55
Oct.	1	536 James Austin .....	Butter .....	8.52
Oct.	1	537 Robert Squires .....	Expense purchasing cow .....	3.00
Oct.	1	538 Frank Emmings .....	Filing saws .....	3.00
Oct.	1	539 J. S. Brubaker .....	Indelible ink, pencils, penhol's .....	1.95
Oct.	1	540 O Jewell .....	Melons .....	.90
Oct.	1	541 Benj. Kendall .....	Bull .....	25.00
Oct.	1	542 J. F. Young .....	Flour and feed .....	31.95
Oct.	1	543 A. S. Chadbourne .....	Coal .....	146.20
Oct.	1	544 B. C. R. & N. R. R. ....	Freight .....	13.00
Oct.	1	545 M. H. Westbrook .....	Services as trustee .....	26.80
Oct.	1	546 George Morehouse .....	Services as trustee .....	13.10
Oct.	1	547 J. Springer .....	Services as trustee .....	20.70
Oct.	1	548 J. L. Gay .....	Services as trustee .....	14.00
Oct.	1	549 S. H. Watson .....	Services as trustee .....	4.00
			Total .....	\$ 2,150.04
Nov.	5	550 Labor account .....	Wages of employes .....	315.19
Nov.	5	551 Brown & Bro .....	Meat .....	124.18
Nov.	5	552 John L. Furry .....	Bread .....	100.54
Nov.	5	553 T. S. Slaughter .....	Salary .....	100.00
Nov.	5	554 G. W. Tannehill .....	Salary .....	48.00
Nov.	5	555 Porter & Fulton .....	Stove and hardware .....	40.61
Nov.	5	556 R. H. Quinn .....	Groceries .....	37.80
Nov.	5	557 D. Stick & Son .....	Groceries .....	36.40
Nov.	5	558 James B. Souders .....	Vegetables .....	34.90
Nov.	5	559 E. H. Clark .....	Butter .....	27.35
Nov.	5	560 A. Rose .....	Groceries .....	27.33
Nov.	5	561 Brown & Bro .....	Corn .....	26.42
Nov.	5	562 M. Meredith, M. D .....	Salary .....	25.00
Nov.	5	563 W. M. Loree .....	Groceries .....	23.48
Nov.	5	564 Henry Bomer .....	Potatoes .....	23.10
Nov.	5	565 C. Ellis & Son .....	Lumber .....	20.55
Nov.	5	566 Leonard Reed .....	Cabbages .....	17.50
Nov.	5	567 Perrine & Taggart .....	Groceries .....	16.19
Nov.	5	568 Isband Noble .....	Apples and eggs .....	14.27
Nov.	5	569 Williams & Young .....	Groceries .....	13.87
Nov.	5	570 Boyles & Bechtel .....	Oysters and crackers .....	10.01
Nov.	5	571 R. W. Barker .....	Fruit .....	8.60
Nov.	5	572 Lewis Pauley .....	Broom corn .....	8.50
Nov.	5	573 Robert McHiffey .....	Turnips .....	8.40
Nov.	5	574 American Express Co .....	Expressage .....	8.30
Nov.	5	575 James Austin .....	Butter .....	7.74
Nov.	5	576 W. T. Melvin .....	Repairing sewing-machine. ....	7.50
Nov.	5	577 Al. & Will. Boggs .....	Honey .....	7.30
Nov.	5	578 F. R. Raiyea .....	Violin strings .....	7.20
Nov.	5	579 E. H. Colcord .....	Apples and grapes .....	7.00
Nov.	5	580 Rich & Murphy .....	Letter-heads .....	6.25
Nov.	5	581 George Horridge & Co .....	Hardware .....	5.85
Nov.	5	582 A. Reeder .....	Milk .....	4.08
Nov.	5	583 J. W. Rich .....	Postage .....	3.80
Nov.	5	584 Watson & Ravenscroft .....	Groceries .....	2.80
Nov.	5	585 T. S. Palmer .....	Ink and carbolic acid .....	2.55
Nov.	5	586 C. R. Wilkinson & Co .....	Envelopes .....	2.50
Nov.	5	587 Jos. S. Brubaker .....	Mustard and lead pencils .....	2.10
Nov.	5	588 J. P. Klemme .....	Lemons .....	1.20
Nov.	5	589 Thomas Cole .....	Whitewashing .....	10.50
Nov.	5	590 B. C. R. & N. R. R. ....	Freight .....	10.90
Nov.	5	591 L. Gould & Co .....	Broom corn .....	41.76
Nov.	5	592 L. Gould & Co .....	Broom corn .....	56.53
Nov.	5	593 Lyon & Healy .....	Violin strings and bows .....	36.28
Nov.	5	594 J. F. Young .....	Flour and shorts .....	15.42
Nov.	5	595 James Hood .....	Apples .....	27.50
Nov.	5	596 N. B. Kneass .....	Raised Point Magazine .....	7.00
Nov.	5	597 M. H. Westbrook .....	Services as trustee .....	22.80



## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1878.				
Nov.	6	Springer	Services as Trustee.	\$ 16.80
Nov.	6	Watson	Services as Trustee	4.00
			Total	\$ 1,482.49
Dec.	3	account.	Wages of employees.	\$ 824.70
Dec.	3	L. & Bro	Meat.	182.72
Dec.	3	L. Furry	Bread	91.54
Dec.	3	W. & Son	Potatoes.	82.85
Dec.	3	Young	Flour and feed	44.45
Dec.	3	ie & Taggart	Groceries	43.70
Dec.	3	ie	Groceries	87.81
Dec.	3	L. & Bro	Corn	84.58
Dec.	3	D. Stick & Son	Groceries and table-ware	25.49
Dec.	3	pe Foundry	Cane and styles	21.80
Dec.	3	right	Stationery	20.80
Dec.	3	er	Soap	20.12
Dec.	3	ichtel.	Groceries	19.35
Dec.	3	Young	Onions and squashes	18.38
Dec.	3		Crackers	15.46
Dec.	3		Groceries	15.00
Dec.	3		Butter	15.00
Dec.	3		Groceries	14.68
Dec.	3		Vinegar	10.10
Dec.	3		Turkeys	9.78
Dec.	3	Boggs	Groceries	9.25
Dec.	3		Milk and hauling	8.60
Dec.	3	alton	Hardware	8.51
Dec.	3	ke	Dry goods	8.08
Dec.	3	dge	Soap and vinegar	15.20
Dec.	3	ers	Dry goods	5.97
Dec.	3		Onions	4.55
Dec.	3	ridge & Co	Brass wire	4.25
Dec.	3	r & Co	Blacksmithing	4.15
Dec.	3		Mattress binding and eggs	4.16
Dec.	3	orders	Subscription, <i>Harper's Magazine</i>	4.10
Dec.	3		Vegetables	3.00
Dec.	3		Postage	3.00
Dec.	3	Express Co	Expressage	2.10
Dec.	3	baker	Indelible ink, etc.	1.50
Dec.	3		Potatoes	80.90
Dec.	3	n & Co	Musical Record	2.00
Dec.	3	ler	Wood	24.00
Dec.	3	lehill	Salary	100.00
Dec.	3	M. D	Salary	48.00
Dec.	3	atress Co	Salary	25.00
Dec.	3	DA	Shoddy	20.00
Dec.	3	Co.	Beads	45.96
Dec.	3	in	Broom corn	120.50
Dec.	3	bourne.	Repairing boiler	101.87
Dec.	3	y's Sons	Coal	150.85
Dec.	3	Manft Co	Apples	183.00
Dec.	3		Fire brick and fire clay	24.25
Dec.	3		Cranberries	7.65
Dec.	3	Lyons & Healy	Music	8.79
Dec.	3	Henry Bernhard	Willows	17.60
Dec.	3	B. C. R. & N. R. R.	Freight	98.87
Dec.	3	H. B. Wilson	Two cows	45.00
Dec.	3	Hammel Augst	Lime	6.10
Dec.	3	D. C. Backus	Tuning pianos	22.50
Dec.	3	Thomas Cole	Masonry around boiler	21.25
Dec.	3	Quinby & Co.	Renovating feathers	21.98
Dec.	3	A. S. Chadbourne	Coal	108.68
Dec.	3	B. C. R. & N. R. R.	Freight	1.91
Dec.	3	M. H. Westbrook	Services as trustee	22.80
Dec.	3	Jacob Springer	Services as trustee	16.80
Dec.	3	S. H. Watson	Services as trustee	4.00
			Total	\$ 2,310.64

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
Jan. 7	662	Robert Carothers .....	Salary .....	\$ 800.00
Jan. 7	663	Emeline E. Carothers .....	Salary .....	75.00
Jan. 7	664	T. F. McCune .....	Salary .....	180.00
Jan. 7	665	Grace A. Hill .....	Salary .....	90.00
Jan. 7	666	Mary Carothers .....	Salary .....	78.00
Jan. 7	667	Lorana Mattice .....	Salary .....	75.00
Jan. 7	668	Hattie Blackman .....	Salary .....	60.00
Jan. 7	669	H. C. Harger .....	Salary .....	45.00
Jan. 7	670	G. W. B. Smalley .....	Salary .....	90.00
Jan. 7	671	John Ciana .....	Salary .....	105.00
Jan. 7	672	George Kraus .....	Salary .....	80.00
Jan. 7	673	T. S. Slaughter .....	Salary .....	100.00
Jan. 7	674	Geo. W. Tannehill .....	Salary .....	42.00
Jan. 7	675	M. Meredith, M. D. ....	Salary .....	25.00
Jan. 7	676	Labor account .....	Wages of employes .....	365.00
Jan. 7	677	Brown & Bro .....	Meat .....	181.80
Jan. 7	678	John L. Furry .....	Bread .....	73.77
Jan. 7	679	E. H. Clark .....	Butter .....	67.90
Jan. 7	680	R. H. Quinn .....	Groceries .....	52.06
Jan. 7	681	W. M. Lorie .....	Groceries .....	47.16
Jan. 7	682	Perrine & Taggart .....	Groceries .....	34.03
Jan. 7	683	Boyles & Bechtel .....	Crackers, candles, &c., &c. ....	24.56
Jan. 7	684	A. Rose .....	Groceries .....	25.82
Jan. 7	685	J. F. Weller & Co. ....	Soap .....	21.62
Jan. 7	686	Williams & Young .....	Canned corn and rice ..	19.00
Jan. 7	687	Brown & Bro .....	Corn .....	31.32
Jan. 7	688	G. M. Gregg .....	Butter .....	15.45
Jan. 7	689	D. Stick & Son .....	Groceries .....	15.45
Jan. 7	690	Jas. Austin .....	Butter .....	18.81
Jan. 7	691	Stickney Bros .....	Lumber .....	18.82
Jan. 7	692	Charles Miller .....	Work in broom shop .....	12.00
Jan. 7	693	Louis Shaffer .....	Work in broom shop .....	12.00
Jan. 7	694	Jervis & Kirk .....	Dry goods .....	11.88
Jan. 7	695	Charles Edson .....	Work in broom shop .....	10.75
Jan. 7	696	Julius Hunt .....	Chickens .....	10.00
Jan. 7	697	A. T. Edwards .....	Butter .....	8.18
Jan. 7	698	Eddy Bros .....	Dry goods .....	7.85
Jan. 7	699	Am. Express Co .....	Expressage .....	7.55
Jan. 7	700	W. E. Ellis .....	Weather stripping for doors...	6.00
Jan. 7	701	Geo. Horridge & Co. ....	Hardware .....	5.10
Jan. 7	702	J. D. Lowe .....	Butter .....	4.32
Jan. 7	703	J. G. Jordan .....	Corn husks .....	4.12
Jan. 7	704	Porter & Fulton .....	Hardware .....	3.55
Jan. 7	705	W. T. Melvin .....	Filing saws .....	3.15
Jan. 7	706	C. R. Wilkinson & Co .....	Subscription to <i>St. Nicholas</i> .....	2.50
Jan. 7	707	J. W. Rich .....	P. O. box-rent .....	1.50
Jan. 7	708	M. Stern .....	German town wool .....	1.30
Jan. 7	709	J. A. Black .....	Corn husks .....	1.26
Jan. 7	710	Jacob Spangler .....	Wood .....	124.00
Jan. 7	711	Kittle Ciana .....	Salary .....	45.00
Jan. 7	712	Thos. Wright .....	Soap .....	22.50
Jan. 7	713	B., C. R. & N. R. R. ....	Freight .....	1.58
Jan. 7	714	A. S. Chadbourne .....	Coal .....	108.18
Jan. 7	715	Crane Bros. Manufacturing Co .....	Valve for steam pump .....	4.00
Jan. 7	716	S. H. Watson & Sons .....	Interest .....	187.24
Jan. 7	717	A. S. Chadbourne .....	Coal .....	121.87
Jan. 7	718	Lyon & Healy .....	Music .....	3.78
Jan. 7	719	W. B. Mack .....	Cranberries .....	7.40
Jan. 7	720	Egbert, Fidler & Chambers ....	Blank Book .....	9.50
Jan. 7	721	Dubuque Mattress Co .....	Shoddy .....	12.55
Jan. 7	722	A. S. Chadbourne .....	Coal .....	177.82
Jan. 7	723	A. S. Chadbourne .....	Coal .....	94.28
Jan. 7	724	P. F. Sturgis .....	Services as trustee .....	26.00
Jan. 7	725	M. H. Westbrook .....	Services as trustee .....	26.00
Jan. 7	726	Jacob Springer .....	Services as trustee .....	20.30
Jan. 7	727	J. L. Gay .....	Services as trustee .....	14.10
Jan. 7	728	S. H. Watson .....	Services as trustee .....	4.00
Jan. 7	729	Geo. Morehouse .....	Services as trustee .....	17.10
Jan. 7	730	M. Stern .....	Pupils' clothing .....	65.90
Jan. 7	731	J. C. Pike & Co. ....	Pupils' clothing .....	42.40



## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
Jan.	7	782 Eddy Bros.....	Pupils' clothing .....	\$ 179.66
			Total .....	\$ 3,684.81
Feb.	4	783 Labor account.....	Wages of employes .....	\$ 837.49
Feb.	4	784 Brown & Bro .....	Meat .....	101.29
Feb.	4	785 John L. Furry.....	Bread .....	76.60
Feb.	4	786 Jacob Spangler.....	Wood .....	75.00
Feb.	4	787 T. S. Slaughter.....	Salary .....	100.00
Feb.	4	788 G. W. Tannehill.....	Salary .....	48.00
Feb.	4	789 M. Meredith, M. D .....	Salary .....	25.00
Feb.	4	740 E. H. Clark .....	Butter.....	52.54
Feb.	4	741 D. Stick & Son.....	Groceries.....	84.88
Feb.	4	742 Perrine & Taggart.....	Groceries.....	19.82
Feb.	4	743 James Austin .....	Butter.....	15.96
Feb.	4	744 G. M. Gregg.....	Butter.....	15.30
Feb.	4	745 A. Rose .....	Groceries.....	15.02
Feb.	4	746 Brown & Bro .....	Corn .....	11.50
Feb.	4	747 Porter & Fulton.....	Hardware and tinware.....	9.78
Feb.	4	748 C. R. Wilkinson & Co.....	Subscription to <i>Inter-Ocean</i> .....	9.10
Feb.	4	749 Boyles & Bechtel .....	Crackers.....	8.97
Feb.	4	750 R. H. Quinn .....	Groceries .....	8.90
Feb.	4	751 A. T. Edwards .....	Butter .....	8.74
Feb.	4	752 Watson & Ravenscroft .....	Buckwheat flour .....	6.63
Feb.	4	753 Boggs Bros.....	Eggs and dried beef .....	6.48
Feb.	4	754 Williams & Young.....	Canned peaches.....	5.50
Feb.	4	755 W. M. Loree .....	Dried beef, baking powders, &c.....	12.98
Feb.	4	756 Julius Hunt.....	Chickens.....	4.37
Feb.	4	757 J. D. Lowe .....	Butter.....	4.28
Feb.	4	758 J. G. Jordan .....	Corn husks .....	4.02
Feb.	4	759 Jervis & Kirk.....	Dry Goods .....	3.88
Feb.	4	760 J. Bozart .....	Sorghum .....	3.60
Feb.	4	761 Paul Breuchaud.....	Lamp burners.....	3.50
Feb.	4	762 Geo. Horridge & Co .....	Hardware .....	3.10
Feb.	4	763 J. W. Rich .....	Postage .....	3.00
Feb.	4	764 J. A. Black .....	Corn husks .....	2.55
Feb.	4	765 A. B. Long .....	Husks .....	2.19
Feb.	4	766 Bills & Mount .....	Clock and repairs.....	2.40
Feb.	4	767 T. S. Palmer .....	Black oil .....	2.25
Feb.	4	768 M. Stern .....	Jumper coats.....	1.80
Feb.	4	769 Rich & Murphy .....	Cutting paper .....	.75
Feb.	4	770 Thomas Wright .....	Soap.....	17.50
Feb.	4	771 Thomas Ridge.....	Soap .....	6.50
Feb.	4	772 A. S. Chadbourne .....	Coal.....	179.51
Feb.	4	773 A. H. Adams .....	Coffee.....	63.90
Feb.	4	774 A. S. Chadbourne .....	Coal.....	186.56
Feb.	4	775 Morrill & Co. ....	Soap .....	84.72
Feb.	4	776 Lyon & Healy .....	Violin strings.....	7.21
Feb.	4	777 A. S. Chadbourne.....	Coal .....	203.28
Feb.	4	778 E. K. Brewer .....	Work .....	82.90
Feb.	4	779 M. H. Westbrook .....	Services as trustee.....	18.80
Feb.	4	780 Jacob Springer .....	Services as trustee.....	16.70
Feb.	4	781 S. H. Watson .....	Services as trustee.....	4.00
			Total.....	\$ 1,819.00
March	4	782 Labor account.....	Wages of employes.....	\$ 834.39
March	4	783 Brown & Bro. ....	Meat .....	106.60
March	4	784 T. S. Slaughter.....	Salary .....	100.00
March	4	785 John L. Furry.....	Bread and crackers.....	79.99
March	4	786 G. W. Tannehill.....	Salary .....	48.00
March	4	787 E. H. Clark .....	Butter .....	47.18
March	4	788 Perrine & Taggart.....	Groceries.....	82.08
March	4	789 Boggs Bros.....	Groceries.....	28.12
March	4	790 M. Meredith, M. D .....	Salary .....	25.00
March	4	791 Brown & Bro. ....	Corn .....	20.53
March	4	792 D. Stick & Son.....	Groceries .....	16.64
March	4	793 W. M. Loree .....	Groceries .....	12.94
March	4	794 A. Rose .....	Groceries .....	12.14
March	4	795 R. H. Quinn .....	Groceries .....	10.88

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
March 4	796	Williams & Young.....	Groceries.....	\$ 10.00
March 4	797	M. W. Parker.....	Vinegar.....	9.68
March 4	798	Boyles & Howard.....	Lemons, Crackers, etc.....	8.55
March 4	799	James Austin.....	Butter and eggs.....	7.62
March 4	800	G. M. Gregg.....	Butter.....	7.50
March 4	801	J. F. Young.....	Cane for chairs.....	6.80
March 4	802	Porter & Fulton.....	Hardware.....	5.10
March 4	804	J. D. Lowe.....	Butter and buttermilk.....	4.87
March 4	805	Jos. S. Brubaker.....	Drugs.....	4.25
March 4	806	E. Davis.....	Blacksmithing.....	3.60
March 4	807	A. T. Edwards.....	Butter.....	3.60
March 4	808	Watson & Ravenscroft.....	Flour and meal.....	3.25
March 4	809	J. W. Rich.....	Postage.....	3.00
March 4	810	Jervis & Kirk.....	Yarn and thread.....	2.88
March 4	811	F. R. Ralyea.....	Machine needles, etc.....	1.65
March 4	812	George P. Bent.....	Ruffler and blocks.....	1.75
March 4	813	T. S. Palmer.....	Black oil, lime and blot'g paper.....	1.70
March 4	814	American Express Co.....	Expressage.....	.75
March 4	815	S. M. Henderson.....	Hauling from depot.....	.40
March 4	816	American Fusee Co., Erie, Pa..	Fusees.....	15.00
March 4	817	J. F. Young.....	Flour and shorts.....	17.57
March 4	818	J. F. Young.....	Flour and shorts.....	9.85
March 4	819	A. S. Chadbourne.....	Coal.....	111.00
March 4	820	B. C. R. & N. R. R.....	Freight.....	5.84
March 4	821	L. Gould & Co.....	Broom material.....	24.94
March 4	822	A. S. Chadbourne.....	Coal.....	220.57
March 4	823	Barnum Bros.....	Wire.....	3.26
March 4	824	A. S. Chadbourne.....	Hard Coal.....	44.37
March 4	825	A. S. Chadbourne.....	Coal.....	124.32
March 4	826	M. H. Westbrook.....	Services as trustee.....	22.80
March 4	827	Jacob Springer.....	Services as trustee.....	16.70
March 4	828	S. H. Watson.....	Services as trustee.....	4.00
		Total.....		\$ 1,581.06
April 1	829	Robert Carothers.....	Salary.....	300.00
April 1	830	Emeline E. Carothers.....	Salary.....	75.00
April 1	831	T. F. McCune.....	Salary.....	180.00
April 1	832	John Cline.....	Salary.....	105.00
April 1	833	T. S. Slaughter.....	Salary.....	100.00
April 1	834	G. W. B. Smalley.....	Salary.....	90.00
April 1	835	Grace A. Hill.....	Salary.....	90.00
April 1	836	Mary E. Carothers.....	Salary.....	78.00
April 1	837	Lorana Mattice.....	Salary.....	75.00
April 1	838	Hattie Blackman.....	Salary.....	60.00
April 1	839	G. W. Tannehill.....	Salary.....	48.00
April 1	840	George Kraus.....	Salary.....	30.00
April 1	841	Mrs. H. C. Harger.....	Salary.....	15.00
April 1	842	M. Meredith, M. D.....	Salary.....	25.00
April 1	843	Labor account.....	Wages of employes.....	354.30
April 1	844	Brown & Bro.....	Meat.....	107.14
April 1	845	John L. Furry.....	Bread.....	28.14
April 1	846	E. H. Clark.....	Butter.....	49.24
April 1	847	Brown & Bro.....	Corn.....	46.31
April 1	848	R. H. Quinn.....	Groceries.....	31.91
April 1	849	Perrine & Colcord.....	Groceries.....	24.63
April 1	850	A. Rose.....	Groceries.....	20.11
April 1	851	W. M. Loree.....	Groceries.....	18.70
April 1	852	D. Stick & Son.....	Groceries.....	17.39
April 1	853	Williams & Young.....	Groceries.....	13.00
April 1	854	Louis Shaffer.....	Work in broom shop.....	12.00
April 1	855	Jervis & Kirk.....	Dry goods.....	9.74
April 1	856	Charles Miller.....	Work in broom shop.....	9.00
April 1	857	Charles Edson.....	Work in broom shop.....	8.25
April 1	858	G. M. Gregg.....	Butter.....	6.00
April 1	859	Geo. Horridge & Co.....	Fluting machine.....	4.75
April 1	860	T. S. Palmer.....	Stationery and oils.....	4.40
April 1	861	Boyles & Howard.....	Crackers.....	3.84
April 1	862	E. Davis.....	Blacksmithing.....	3.70

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
April	1	863 Porter & Fulton .....	Glass and hardware .....	\$ 3.65
April	1	864 Verharen & Bro. ....	Repairing harness .....	3.40
April	1	865 Eddy Bros. ....	Dry goods .....	3.12
April	1	866 F. R. Ralyea .....	Violin strings .....	3.10
April	1	867 W. T. Melvin .....	Filing saws .....	3.00
April	1	868 Am. Express Co .....	Expressage .....	2.00
April	1	869 J. F. Young .....	Flour and feed .....	18.30
April	1	870 A. S. Chadbourne .....	Coal .....	135.20
April	1	871 W. S. Hancock .....	Broom corn .....	31.87
April	1	872 B., C. R. & N. R. R. ....	Freight .....	5.72
April	1	873 A. H. Adams .....	Tea .....	45.85
April	1	874 A. S. Chadbourne .....	Coal .....	63.74
April	1	875 A. S. Chadbourne .....	Coal .....	119.08
April	1	876 G. L. Smead .....	50 copies of proceedings of Fifth Conv. of Instructors of Blind..	16.13
April	1	877 Geo. Morehouse .....	Services as trustee .....	17.10
April	1	878 M. H. Westbrook .....	Services as trustee .....	28.80
April	1	879 P. F. Sturgis .....	Services as trustee .....	26.00
April	1	880 J. L. Gay .....	Services as trustee .....	14.10
April	1	881 Jacob Springer .....	Services as trustee .....	20.70
April	1	882 S. H. Watson .....	Services as trustee .....	8.00
			Total .....	\$ 2,663.41
May	6	883 Labor account. ....	Wages of employes .....	\$ 320.92
May	6	884 T. S. Slaughter .....	Salary .....	100.00
May	6	885 Brown & Bro .....	Meat .....	88.76
May	6	886 J. L. Furry .....	Bread .....	75.51
May	6	887 Geo. W. Tannehill .....	Salary .....	48.00
May	6	888 E. H. Clark .....	Butter .....	47.44
May	6	889 A. Rose .....	Groceries .....	36.97
May	6	890 D. Stick & Son .....	Groceries .....	28.86
May	6	891 M. Meredith, M. D .....	Salary .....	25.00
May	6	892 W. M. Loree .....	Groceries .....	19.48
May	6	893 Perrine & Colcord .....	Groceries .....	17.07
May	6	894 R. H. Quinn .....	Groceries .....	15.55
May	6	895 Brown & Bro .....	Corn .....	11.47
May	6	896 Ryder & Mitchell .....	Eggs .....	7.44
May	6	897 Boyles & Howard .....	Crackers .....	4.29
May	6	898 Eddy Bros. ....	Dry goods .....	3.35
May	6	899 Boggs Bros. ....	Groceries .....	3.00
May	6	900 H. E. Warner .....	Vegetables .....	3.00
May	6	901 Jos. S. Brubaker .....	Indelible ink, sassafras bark, &c.	2.15
May	6	902 W. T. Melvin .....	Filing wood saws .....	1.60
May	6	903 Jervis & Kirk .....	Dry goods .....	1.50
May	6	904 Watson & Ravenscroft .....	Corn meal .....	1.25
May	6	905 J. A. Bills .....	Repairing horn and clock .....	1.00
May	6	906 S. M. Henderson .....	Hauling from depot .....	.50
May	6	907 Brown & Shortess .....	Repairing pump .....	1.00
May	6	908 G. M. Gregg .....	Butter .....	10.80
May	6	909 S. H. Watson & Son .....	Interest on money advanced .....	276.77
May	6	910 S. H. Watson .....	Exch. p'd G. W. Bemis, St. Treas.	6.00
May	6	911 Crane Bros. Manufacturing Co.	Iron pipe and water bibbs .....	11.10
May	6	912 A. S. Chadbourne .....	Coal .....	127.48
May	6	913 Morrill & Co .....	Soap .....	42.28
May	6	914 W. S. Hancock .....	Broom corn .....	40.57
May	6	915 B. C. R. & N. R. R. ....	Freight .....	8.90
May	6	916 Foering & Co .....	Laundry grate .....	6.60
May	6	917 A. S. Chadbourne .....	Coal .....	54.98
May	6	918 D. C. Backus .....	Tuning instruments .....	26.00
May	6	919 A. S. Chadbourne .....	Coal .....	57.47
May	6	920 M. H. Westbrook .....	Services as trustee .....	22.80
May	6	921 Jacob Springer .....	Services as trustee .....	16.70
May	6	922 S. H. Watson .....	Services as trustee .....	4.00
			Total .....	\$ 1,577.54
June	17	923 Robert Carothers .....	Salary .....	\$ 300.00
June	17	924 E. E. Carothers .....	Salary .....	75.00
June	17	925 T. S. Slaughter .....	Salary .....	200.00
June	17	926 T. F. McCune .....	Salary .....	180.00

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
June 17	927	John Clisna.....	Salary.....	\$ 105.00
June 17	928	G. W. Tannehill.....	Salary.....	96.00
June 17	929	Labor account.....	Wages of employes .....	516.58
June 17	930	Grace A. Hill .....	Salary.....	90.00
June 17	931	G. W. B. Smalley.....	Salary .....	90.00
June 17	932	Mary E. Carothers .....	Salary .....	78.00
June 17	933	Lorana Mattice.....	Salary .....	75.01
June 17	934	Hattie Blackman .....	Salary .....	60.00
June 17	935	M. Meredith, M. D.....	Salary .....	50.00
June 17	936	Kittle Clisna .....	Salary .....	47.00
June 17	937	Eilen Hamilton.....	Salary .....	30.00
June 17	938	George Kraus.....	Salary .....	30.00
June 17	939	Louis Shaffer .....	Work in shop .....	12.00
June 17	940	Brown & Bro.....	Meat.....	142.16
June 17	941	John L. Furry.....	Bread.....	105.84
June 17	942	E. H. Clark.....	Butter.....	79.97
June 17	943	A. S. Chadbourne .....	Coal.....	46.81
June 17	944	Perrine & Colcord.....	Groceries.....	41.05
June 17	945	Wm. M. Loree.....	Groceries.....	35.92
June 17	946	Boggs Bros .....	Groceries .....	32.80
June 17	947	G. M. Gregg.....	Butter and buttermilk .....	32.74
June 17	948	R. H. Quinn.....	Groceries .....	30.95
June 17	949	A. Rose.....	Groceries .....	22.81
June 17	950	J. F. Young.....	Flour and feed .....	21.78
June 17	951	Stickney Bros .....	Lumber .....	20.93
June 17	952	Boyles & Howard .....	Crackers and ice cream ..	14.63
June 17	953	M. Donelan .....	Water-lime sand and labor .....	14.60
June 17	954	A. G. Spaulding & Bro .....	Dumb bells and rings .....	14.00
June 17	955	Williams & Young.....	Groceries .....	10.92
June 17	956	J. W. Donavin.....	Admission to concert. ....	10.00
June 17	957	Jervis & Kirk .....	Dry goods.....	9.85
June 17	958	F. R. Ralyea.....	Violin strings, etc.....	8.84
June 17	959	B. C. R. & N. R. R .....	Freight.....	8.49
June 17	960	Brown & Bro.....	Corn .....	7.82
June 17	961	Porter & Fulton.....	Hardware.....	9.61
June 17	962	M. Stern.....	Dry goods.....	6.55
June 17	963	E. K. Brewer .....	Mowing grounds.....	5.50
June 17	964	P. L. Uttley.....	Maple sugar .....	3.60
June 17	965	J. W. Rich, P. M .....	Postage stamps.....	3.00
June 17	966	T. S. Palmer .....	Drugs.....	2.90
June 17	967	E. Davis .....	Blacksmithing .....	2.30
June 17	968	J. S. Brubaker .....	Drugs.....	1.30
June 17	969	W. T. Melvin .....	Filing saws .....	1.25
June 17	970	D. Stick & Son .....	Groceries .....	81.98
June 17	971	Eddy Bros .....	Dry goods .....	4.56
June 17	972	Jas. B. Souders .....	Vegetables .....	61.70
June 17	973	J. F. Young .....	Funeral expenses of L. Adair....	27.00
June 17	974	J. F. Young .....	Flour and feed .....	18.93
June 17	975	A. S. Chadbourne .....	Coal.....	28.83
June 17	976	Am. Ex. Company.....	Expressage .....	.60
June 17	977	St. Louis Type Foundry.....	Type .....	100.69
June 17	978	Robert Carothers.....	Traveling expenses for pupils...	22.00
June 17	979	Jacob Springer.....	Services as Trustee .....	20.70
June 17	980	M. H. Westbrook.....	Services as Trustee .....	26.80
June 17	981	P. F. Sturgis .....	Services as Trustee .....	26.00
June 17	982	J. L. Gay .....	Services as Trustee .....	14.10
June 17	983	George Morehouse.....	Services as Trustee .....	17.10
June 17	984	S. H. Watson .....	Services as Trustee .....	8.00
June 17	985	M. Stern .....	Pupils' clothing .....	33.15
June 17	986	J. C. Pike & Co .....	Pupils' clothing .....	37.80
June 17	987	Eddy Bros.....	Pupils' clothing .....	146.45
			Total.....	\$ 3,406.13
Aug. 5	988	Labor account.....	Wages of employes .....	\$ 334.39
Aug. 5	989	Brown & Bro .....	Meat and ice.....	49.93
Aug. 5	990	John L. Furry .....	Bread .....	29.23
Aug. 5	991	R. H. Quinn .....	Groceries .....	3.54
Aug. 5	992	M. W. Parker .....	Raspberries .....	26.00
Aug. 5	993	Perrine & Colcord.....	Groceries.....	25.67
Aug. 5	994	Geo. W. Haines .....	Cutting and putting up hay.....	23.00

## SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
Aug.	5 98		Lumber	19.40
Aug.	5 98		Groceries	18.18
Aug.	5 98		Hardware	13.49
Aug.	5 98		Vinegar	10.89
Aug.	5 98		Cherries and currants	7.73
Aug.	5 00		Horse hire	7.58
Aug.	5 100		Currants and cherries	6.37
Aug.	5 100		Groceries	6.17
Aug.	5 100	F. D. Toney	Panel-plow, chisel, fly-trap	6.06
Aug.	5 104	Boyles & Howard	Crackers and ice cream	5.11
Aug.	5 105	James Jenks	Labor	4.30
Aug.	5 106	W. M. Loree	Groceries	4.26
Aug.	5 107	E. Davis	Blacksmithing	4.05
Aug.	5 108	Borgs Bros	Starch and eggs	3.99
Aug.	5 1 00	Am. Ex. Company	Expressage	2.15
Aug.	5 1010	J. W. Butler & Co	Mattress binding	1.96
Aug.	5 1011	J. S. Brubaker	Drugs	1.74
Aug.	5 10	nes Magoon	Repairing wringers	1.25
Aug.	5 10	T. Melvin	Filing saws	1.00
Aug.	5 10	J. Palmer	Fly paper and blotting paper	.80
Aug.	5 10	philet Winn	Cleaning privies	10.00
Aug.	5 10	J. Griffin, M. D	Salary	25.00
Aug.	5 10	nes B Souders	Vegetables	34.75
Aug.	5 10	W. McLaughlin	Potatoes and cutting grass	9.90
Aug.	5 10	a. Porterfield	Strawberries	1.75
Aug.	5 10	B. C. R. & N. R. R.	Freight	2.82
Aug.	5 1021	Dubuque Mattress Co.	Mattress wool	10.25
Aug.	5 1022	M. H. Westbrook	Services as Trustee	23.50
Aug.	5 1023	Jacob Springer	Services as Trustee	16.70
Aug.	5 1024	S. H. Watson	Services as Trustee	4.00
			Total	792.86
Sept.	2 1025	Towle & Roper	Groceries	425.36
Sept.	2 1026	Labor account	Wages of employees	234.04
Sept.	2 1027	Geo. Horridge & Co.	Elevator	155.18
Sept.	2 1028	Verharen Bros	Harness	25.35
Sept.	2 1029	F. H. Clark	Butter	31.80
Sept.	2 1030		Butter	29.65
Sept.	2 1031		Meat	19.77
Sept.	2 1032		Bread	14.96
Sept.	2 1033		Oil and groceries	12.15
Sept.	2 1034		Lumber	10.25
Sept.	2 1035		Blacksmithing	9.60
Sept.	2 1036		Mason work	8.00
Sept.	2 1037	rd & Co., Chic'go	Pulleys	8.44
Sept.	2 1038		Groceries	6.92
Sept.	2 1039		Potatoes	6.60
Sept.	2 1040		Fruit	4.62
Sept.	2 1041		Postage and box-rent	4.50
Sept.	2 1042		Ash lumber	4.44
Sept.	2 1043		Groceries	4.40
Sept.	2 1044		Lime	4.00
Sept.	2 1045		Groceries	3.85
Sept.	2 1046		Grapes	3.70
Sept.	2 1047		Cutlery braille paper	1.60
Sept.	2 1048		Hardware	1.48
Sept.	2 1049		Fruit	1.35
Sept.	2 1050		Filing saws	1.20
Sept.	2 1051		Drugs	1.00
Sept.	2 1052		Carpet stretcher	1.00
Sept.	2 1053		Ink, &c	1.00
Sept.	2 1054		Eggs	.41
Sept.	2 1055		Melons	.60
Sept.	2 1056		Oats	11.63
Sept.	2 1057		Vegetables	14.23
Sept.	2 1058		Salary	25.00
Sept.	2 1059		Potatoes	1.65

## SCHEDULE OF EXPENDITURES—Continued.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
Sept.	2 1000	Jacob Springer	Services as Trustee	\$ 14.70
			Total	\$ 1,140.98
Oct.			ry.	\$ 300.00
Oct.			ry.	100.00
Oct.			ry.	100.00
Oct.			ry.	60.00
Oct.			ry.	48.00
Oct.			ry.	85.00
Oct.			ry.	30.00
Oct.			ry.	80.00
Oct.			ry.	28.00
Oct.			ry.	28.00
Oct.			ry.	25.00
Oct.			ry.	25.00
Oct.			ry.	20.00
Oct.			ry.	15.00
Oct.			ry.	10.00
Oct.			t.	50.77
Oct.			ies	80.54
Oct.			ber	31.12
Oct.			d	31.24
Oct.	7 1080	Brown & Bro	Corn and oats	21.90
Oct.	7 1081	Perrine & Colcord	Groceries	21.08
Oct.	7 1082	G. M. Gregg	Butter	15.00
Oct.	7 1083	James B. Souders	Vegetables	13.00
Oct.	7 1084	Ira C. Kimball	Potatoes	12.00
Oct.	7 1085	T. S. Palmer	Paints and stationery	12.48
Oct.	7 1086	Porter & Fulton	Hardware	12.08
Oct.	7 1087	R. W. Barker	Fruit	9.42
Oct.	7 1088	R. H. Quinn	Groceries	9.30
Oct.	7 1089	Geo. Horridge & Co.	Hardware	8.90
Oct.	7 1090	F. R. Ralyea	Violin strings, &c.	5.65
Oct.	7 1091	G. L. Johnson	Mowing grounds	5.50
Oct.	7 1092	Jervis & Kirk	Dry goods	4.95
Oct.	7 1094	Mrs. H. C. Golden	Plants	4.85
Oct.	7 1095	A. Rose	Groceries	4.48
Oct.	7 1096	E. Davis	Blacksmithing	4.00
Oct.	7 1097	W. H. McFarland	Broom corn	4.50
Oct.	7 1098	Boggs Bros	Groceries	2.70
Oct.	7 1099	H. W. Botaford	Vegetables	2.65
Oct.	7 1100	W. M. Loree	Groceries	2.11
Oct.	7 1101	Eddy Bros	Dry goods	1.50
Oct.	7 1102	Jos. S. Brubaker	Drugs	1.65
Oct.	7 1103	W. T. Melvin	Filing saws	.80
Oct.	7 1104	H. E. Warner	Grapes	5.00
Oct.	7 1105	D. Stick & Kemp	Groceries	25.83
Oct.	7 1106	Morrill & Co.	Soft soap	27.44
Oct.	7 1107	Egbert, Fidiar & Chambers	Rockbinding	12.20
Oct.	7 1108	Labor account	Wages of employes	206.91
Oct.	7 1109	H. Lyndenmeyr	Braille paper	162.08
Oct.	7 1110	B. C. R. & N. R. R.	Freight	51.04
Oct.	7 1111	Shockley & Son	Painting	8.77
Oct.	7 1112	A. S. Chadbourne	Coal	116.28
Oct.	7 1113	A. S. Chadbourne	Coal	222.58
Oct.	7 1114	H. H. Ellyson	Horse	125.00
Oct.	7 1115	W. T. Marine	Two cows	50.00
Oct.	7 1116	W. B. Hancock	Broom material	25.46
Oct.	7 1117	Field, Lieter & Co.	Dry goods	37.04
Oct.	7 1118	S. H. Watson	Exchange on State warrants	4.62
Oct.	7 1119	M. H. Westbrook	Services as Trustee	22.80
Oct.	7 1120	George Morehouse	Services as Trustee	17.10
Oct.	7 1121	Jacob Springer	Services as Trustee	14.70

SCHEDULE OF EXPENDITURES—CONTINUED.

DATE.	Warrant and voucher.	TO WHOM ISSUED.	ON WHAT ACCOUNT.	Amount.
1879.				
Oct.	7 1122	J. S. Gay .....	Services as Trustee .....	\$ 20.20
Oct.	7 1123	S. H. Watson .....	Services as Trustee .....	4.00
			Total.....	\$ 2,451.99
		Total expenditures to Sep- tember 30, 1879.....		\$47,428.77
		Balance on hand.....		5,279.78
		Total .....		\$52,708.53

S. H. WATSON, Treasurer.













**REPORT**  
**OF THE**  
**JOINT COMMITTEE**  
**OF THE**  
**EIGHTEENTH GENERAL ASSEMBLY**  
**OF THE**  
**STATE OF IOWA,**  
**APPOINTED TO VISIT THE**  
**COLLEGE FOR THE BLIND,**  
**LOCATED AT**  
**VINTON.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**



# REPORT.

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*Report of the Joint Committee appointed by the Eighteenth General Assembly to visit the College for the Blind.*

TO THE EIGHTEENTH GENERAL ASSEMBLY:

YOUR committee appointed to visit the College for the Blind report that they have performed that duty, and submit the following report:

We found the institution in a healthy condition, under excellent discipline, and thoroughly organized for efficient labor. It has the merit of being well managed, and the instructors and teachers are alive to their work. They have been supplied with all the modern improvements adapted for the training and culture of the blind, and the disposition manifested by the pupils to excel in the various branches taught can but be noticed by those who may be even chance visitors. Cleanliness and habits of tidiness are inculcated from the entrance of a student in this institution.

The college building, as well as the work-rooms and all out-buildings, indicate how thoroughly those in charge have striven to keep them clean, orderly, and healthful; and nothing is wanting in this respect. General good health prevails among the students, and the only cases of illness in the institution during the biennial period can readily be traced to colds caused by undue exposure, which cannot be guarded against by those in charge, exercising, as they do, the closest watchfulness.

The whole number of students enrolled is eighty-six, indicating a falling off in the attendance since the last report.

By inquiry, we found that there are in this State not less than 500 blind persons, old and young. It is to be regretted that the institution is not filled to its utmost capacity. The building is of sufficient size to accommodate fully 150 students, and after a thorough examination,

we are unable to report any cause for complaint. Those in attendance are happy, contented, and when once familiar with the round of duties and studies, the advantages offered, and perhaps more on account of the attractions of the life so well calculated and arranged for them—a student rarely if ever leaves the institution of his or her own volition. The reasons why this institution is not filled to overflowing—an institution which the State has so generously provided for the education and development of this class of unfortunate persons—may be accounted for on two grounds. Either one or both may afford an explanation:

*First.* There is a false impression prevalent throughout the State relative to the character of this institution, viz: that it is an *asylum* for the blind, where this class of persons may seek a refuge or a home, when they or their friends cannot suitably provide for their temporal wants. While it is a fact that its doors are open to the poor as well as to the rich, and the institution is supported by the State—none are turned away because of their inability to support themselves, yet here the distinction ceases. It cannot be called an *asylum*. It is a *college for the blind*, where the State has ever in readiness a corps of competent teachers and instructors, with cheerful hearts and ready hands to lead and guide all of suitable age and mental faculties to become good scholars in the ordinary branches, sciences and music, as well as to fit them for some avocation in life, whereby they may be enabled to earn their own livelihood. By inquiry, your committee found that the larger number of those in attendance at this college come from families who, if not opulent, were well to do, or were worthy of being classed among the better classes of society.

The *second* cause which has prevented the college from being filled to overflowing lies in the improper way provided by law for informing the Superintendent of the college of the place of residence of the blind persons within the State. Sub-division 11 of section 1745 of the Code directs the district secretary of each township to notify the Superintendent of the county in which he resides the name, age, and place of residence of each blind person in his district, and in turn section 1680 of the Code provides that each county superintendent in the State shall report to the Superintendent of the College for the Blind the names, ages, residence, etc., of such blind persons residing in his county. The district township secretary, in a majority of cases, forgets or neglects to perform his duty in this particular, and when he



does report as required he fails to give the name and post-office address of the parents of such blind children in his district. It will be readily seen that the Superintendent of the college has not the means of communicating with the parents of such blind children, simply because the sections of the Code above referred to do not make it the duty of the proper officer to transmit the information. An amendment to these sections of the Code is suggested, and other means devised whereby the Superintendent of the institution can be informed of these facts, which will result in filling the institution with pupils to its utmost capacity. The corps of teachers and instructors is sufficient to care for all who can be accommodated therein, while it would not necessarily increase the number of employes, to exceed three or four. It may not be out of place to add here that after carefully considering the manner in which each instructor or teacher is engaged we cannot see how the number can be reduced without lessening the usefulness of the institution, though the same teachers now employed could easily instruct nearly double the number of pupils.

To the end that the Superintendent of that institution may be advised fully as to the name and age of each blind person in the State, as well as the name and post-office address of the parents of blind children, it would seem that this information can be obtained at slight expense to the State during the present year at the time of taking the census. As the institution is maintained at great expense to the State, and while the students now in attendance are making rapid progress in ordinary branches as well as music, yet a larger number are without the institution, and might derive the same benefit without any great additional expense.

Then, too, there are quite a large number of young men and young women in the State who, on account of blindness, can really do nothing by way of self-support, and are too old to commence a course of study, and may feel a delicacy on account of their age about attempting to gain an education. The principal of the college suggests that such young men and young women, possessed of good morals, and not over twenty years of age, might, in small numbers, find it greatly to their advantage to avail themselves of the opportunity of learning a trade in the industrial departments of the institution. Such young men could be taught to make brooms, weave baskets, make mattresses, etc., while the young women can be taught to sew, knit, etc., in the clothing department. It seems in keeping with the record we have

established in the past, to lend a helping hand to such unfortunates as may feel inclined to accept the opportunities offered, and encourage them to habits of usefulness. Your committee, therefore, recommend that the Trustees of the institution be authorized to receive such as may present themselves, when they become satisfied that the applicants come under the rule above indicated.

In accordance with the concurrent resolution passed by the Eighteenth General Assembly, your committee made the investigation required of them, and herewith append their report, as follows:

1st. They find that the appropriations made by the Seventeenth General Assembly have been wisely and economically expended.

2d. They find that the appropriations made by the last General Assembly were expended only for the objects appropriated, so far as the money was expended

For bedsteads, chairs, etc., there was appropriated.....	\$ 1000 00
And there has been expended .....	612 22

Balance remaining unexpended, which will be hereafter needed.	\$ 387 78
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Of the amount appropriated for sewer.....	\$ 800 00
There was expended the sum of .....	645 26

Leaving still in the Treasurer's hands the sum of.....	\$ 154 74
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The amount appropriated for repairing fence, \$400, still remains in the State Treasury, no warrant having been drawn for the same.

For contingent expenses there was appropriated the sum of .....	\$ 400 00
Of which there has been expended.....	392 85

Leaving a balance of .....	\$ 7 15
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Showing a balance of the appropriations made by the Seventeenth

General Assembly of.....	\$ 949 67
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As the institution will need the balance appropriated for the purpose of purchasing bedsteads, bedding and chairs, there should be deducted from the amount above stated, the sum of \$387.78, which will leave still unexpended \$561.89, which will not be required for the purposes appropriated.

3d. We find that chapter 67 of the Acts of the Seventeenth General Assembly, has been complied with, in not contracting indebtedness in excess of the appropriations.

4th. We find there has been no diversion of any money from the specific purpose for which it was drawn out of the State Treasury.

5th. Your committee found that the same persons are in the employ of this institution, and for the same purposes and at the same salary as set forth in the fourteenth biennial report of this institution, and that said persons receive no other or further compensation than is therein stated. All of said persons board in the institution, unless otherwise stated.

As the above report is in print, we make reference to page twenty-seven for the balance of our answer.

The college has been well managed, and the expenditures have not been excessive for a State institution, yet the amount of money in the hands of the Treasurer of the institution indicates that there has been more money appropriated for different purposes than has been needed. The following is the surplus, including funds not drawn from State Treasury:

Balance of special library appropriation, Sixteenth General Assembly.....	\$ 1 52
Balance of special appropriation for music, Sixteenth General Assembly.....	2 59
Balance of special appropriation for bedsteads, etc., Seventeenth General Assembly.....	387 78
Balance of special appropriation to repair fences (not drawn), Seventeenth General Assembly.....	400 00
Balance of special appropriation for contingent expenses, Seventeenth General Assembly.....	7 15
Balance of special appropriation for sewer, Seventeenth General Assembly.....	154 74
Balance of general fund, in hands of Treasurer.....	5472 66
Making a grand total of.....	\$ 6426 44

The appropriations asked for the coming biennial period are stated in the Trustees' fourteenth biennial report, and are as follows:

Removing old ceiling of main building and replacing same with new.....	\$ 600 00
Repairing boilers.....	1000 00
New iron fences.....	4000 00
For cattle barn and hog house.....	1000 00
Total.....	\$ 6600 00

Having in view the needs of the State at the present time, and the absolute necessity of refraining from making any appropriations which are not absolutely required, we cannot recommend the building of the

iron fence which the State is asked by the institution to make provision for by way of an appropriation. The present fence, though not ornamental, can be made to protect the grounds at an expense comparatively small to the amount asked. There is really great danger in allowing the plastering on the ceiling of the main building to remain longer as it is thick, and the ceilings high; in many places the plastering is cleaving off and liable to fall on the heads of the occupants of that part of the building. An appropriation should be made to meet the expense of removing and replacing the plastering on so much of the ceiling of the main building as may be found to be loose or liable to fall, and \$600 is therefore suggested as being sufficient to meet the expense.

The present barn used for cattle and hogs is unworthy of the name. It is too small and too crowded to answer the purpose desired. A portion of the material contained in it can doubtless be utilized in the construction of a new barn, or of the hog house, and \$800 will doubtless be sufficient to build a sufficiently large cattle barn and hog house with the material that can be saved from the old building to meet the wants of the State, in this particular, for many years.

There are three boilers used for heating purposes, two of which have been in use nine years, and the third not as long. All these have been patched and are not safe. They might be used a year or more longer, but there is great danger of their giving out or leaking badly, at any time. The pump connected with the engine is also badly worn, and works imperfectly; this needs a small outlay to place it in good repair. \$1,000 is considered to be a sufficient sum to repair the boilers and the pump, and we therefore recommend that that amount be appropriated to include repairs on boilers and the pump.

There is also really needed a small amount to be used for contingent expenses, which was not stated in the estimate of the Trustees. In view of the fact that \$400 was appropriated by the 17th General Assembly to be used in repairing fence, your committee consider that sum too large to be needed for that purpose at the present time and suggest the propriety of transferring that appropriation to the contingent fund, with a provision that such a portion may be used for repairing the fences as may be required, and the balance to be used for contingent purposes. There is also a small amount needed occasionally for music and musical instruments, and we suggest the propriety of transferring for that purpose the balance of the sewer fund appropria-

ted by the last General Assembly which, it will be remembered, amounts to \$154.74.

We see no reason for increasing the pupilage appropriation which was reduced by the 17th General Assembly to thirty-six dollars per quarter for each pupil. The fact that the general fund is constantly increasing is the very best argument that can be used that the reduction of the same by the General Assembly two years ago was wise.

As previously stated, there is at the present time a balance in the hands of the treasurer of the institution belonging to what is known as the general fund, the sum of \$5,472.66, which is constantly increasing. While the management is worthy of being congratulated for so wisely husbanding the funds, there seems to be no reason for keeping so large an amount of money on hand, and your committee suggest that this sum be placed to the credit of the ordinary expense fund and the whole amount expended before any more money is drawn from the treasury as is contemplated in section 1675 of the Code.

The physician in attendance at the institution expresses the belief that quite a number of the students in attendance at the college might if properly treated be permanently cured of blindness, and it is thought by the trustees and principal desirable to employ an oculist and prepare a room in the building for treatment of those most likely to be benefited. It is thought that \$1,500 would be ample for that purpose, which would include all expenses connected with the proposed trial of skill. The committee sent to visit this institution by the 17th General Assembly made a similar report, but no action on the subject was taken by that body, and it now remains for the 18th General Assembly to decide how they will treat it.

To recapitulate, your committee have found that the following appropriations and transfer of funds are desirable and therefore recommend them:

For repairing boilers and pump .....	\$ 1000 00
For removing and replacing plastering of ceiling in main building .....	600 00
For building barn and hog-house.....	800 00
The transfer of the appropriation made by 17th General Assembly for repairing fence to contingent fund.....	400 00
The transfer of balance of sewer fund to fund for purchasing music and musical instruments.....	154 74

A. H. LAWRENCE,  
*On behalf of the Senate.*

D. W. STUTSMAN,  
E. J. DEAN,  
*On behalf of the House.*



# SECOND BIENNIAL REPORT

OF THE

TRUSTEES, SUPERINTENDENT AND TREASURER

OF THE

# Iowa State Asylum for Feeble-Minded Children

AT

## GLENWOOD.

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OCTOBER 1st, 1879.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:

F. M. MILLS, STATE PRINTER.

1880.





IOWA ASYLUM  
FOR FEEBLE-MINDED CHILDREN,  
GLENWOOD, Oct. 1, 1879. }

*To HIS EXCELLENCY, JOHN H. GEAR, Governor of Iowa:*

SIR—I have the honor of transmitting herewith a copy of the second biennial report of this institution for the use of your Excellency and of the Legislature.

Very respectfully,  
O. W. ARCHIBALD, *Sec'y Board of Trustees.*



# OFFICERS OF THE ASYLUM.

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## TRUSTEES:

HON. D. M. BAKER, CHARITON.  
S. B. THRALL, M. D., OTTUMWA.  
E. R. S. WOODROW, ESQ., GLENWOOD.

## PRESIDENT OF THE BOARD:

HON. D. M. BAKER.

## TREASURER:

E. R. S. WOODROW, ESQ.

## SECRETARY:

O. W. ARCHIBALD, M. D.

## CONSULTING PHYSICIAN:

J. A. DONELAN, M. D.

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## RESIDENT OFFICERS.

### SUPERINTENDENT:

O. W. ARCHIBALD, M. D.

### MATRON:

MRS. S. A. ARCHIBALD.

### TEACHERS:

MISS M. MAUD ARCHIBALD.  
MISS JENNIE VAN DORIN.  
MISS SABRINA ARCHIBALD.

### CLERK:

A. C. ROGERS.

### HOUSEKEEPER:

MISS EMMA BROWN.

### SUPERVISOR:

MISS CORDELIA BARR.



## TRUSTEES' REPORT.

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TO THE GOVERNOR AND MEMBERS OF THE EIGHTEENTH GENERAL ASSEMBLY OF IOWA:

THE Board of Trustees for the Asylum for Feeble-Minded Children respectfully offer the following as their biennial report of the condition of said institution:

The Board, which was elected by the Seventeenth General Assembly, met in their first regular session at the Asylum in Glenwood, on the 24th of April, 1878, and organized by electing Mr. J. M. Hiatt, of New Sharon, President, E. R. S. Woodrow, Resident-trustee of Glenwood, Treasurer, and Dr. O. W. Archibald, Superintendent of the Asylum, Secretary.

The Treasurer's bond was fixed in the sum of ten thousand dollars (\$10,000), which was duly approved and filed as required by law.

Having organized, we re-elected Dr. O. W. Archibald, the former Superintendent, to the same position; also re-elected his wife, Mrs. S. A. Archibald, Matron, she having served in that capacity for the preceding two years. We proceeded to examine the condition of the property of the State connected with the institution, and found everything in as fair condition as could possibly be expected, considering the disadvantageous circumstances under which predecessors in office had been forced to labor for the previous two years, on account of the financial difficulties that beset the Asylum.

The main building was in tolerable condition, but needing repairs on the inside in the shape of new floors and new plastering in many of the rooms.

There were no stables or barn, and the facilities for procuring water for the inmates of the Asylum, as well as for the stock on the place, were wretched, there being no other resort but to haul it in barrels nearly a quarter of a mile.

The fences around the building and the grounds, owned by the in-

stitution, were poor and afforded scarcely any protection whatever from stock running at large.

The legislature had appropriated sufficient money to pay off all deficiencies, and had given us sufficient means wherewith to accomplish some very much needed improvements. The first and most important thing demanded by the exigencies of the Asylum, was more room.

The sum of thirty-five hundred dollars (\$3,500) had been appropriated for a new school-room and gymnasium. The Board advertised for sealed bids for the construction of a two-story brick building 30x60 feet. The contract was awarded in May, 1878, to Messrs. Graham & Strayer, of Glenwood, both honest, practical mechanics, who immediately began the work in accordance with the terms of the contract.

In the month of September the building was finished and accepted by the Board. In justice to the builders, and to the credit of the State, we are proud to say that they constructed a strong, durable, substantial building, complying with the requirements of the contract, both in its letter and spirit, and one which the Board think is a model in its comforts and conveniences, as well as in the cost. Though not as large and commodious as the necessities of the institution required, yet it was the largest and best we could build out of the limited allowance made by the General Assembly for that purpose.

The Board also have constructed a frame laundry at a cost of seven hundred and fifty dollars (\$750), and a comfortable little barn, 25x40 feet, at a cost of three hundred and seventy-five dollars (\$375), appropriations having been made therefor. Both were built in a workman-like manner, and are well worth the money they cost, though, as with the school-room and gymnasium, they are too small for the necessities of the Asylum. However, we used the money intrusted to our care to the very best possible advantage, and completed every improvement authorized by the Acts of the Seventeenth General Assembly by strictly adhering to the law and the obligations of our office; consequently we are pleased to say there are no "deficiencies" in the special funds appropriated for building purposes, though we labored under serious inconvenience in our determined endeavors to make each fund fulfill its mission and accomplish the object for which it was intended.

As we have before said, the water supply was wretched, and with the money placed at our disposal for remedying this inconvenience, we authorized the Superintendent to proceed as soon as possible to

contract for a large well, not to exceed in cost the amount appropriated for that purpose. A well was dug one hundred and twenty-five (125) feet deep, four and one-half ( $4\frac{1}{2}$ ) feet in diameter. A good vein of water was struck, which it was hoped would prove sufficient to meet the demands of the institution, and a wind-mill was purchased with which to pump it. So far, with careful economy, the well, aided by the two (2) cisterns already constructed, has furnished the Asylum with sufficient water to meet the demands, but at times the supply is exceedingly short.

The wind-mill has failed to come up to our expectations in pumping the water, which has been the chief trouble since the well was dug. We caused to be erected a substantial tank holding about one hundred and fifty (150) barrels for the reception of the water, but owing to a lack of the necessary wind, the tank is rarely half full and sometimes not one-fourth.

In case of a fire breaking out, the buildings would, on this account, be placed in great peril, as upon an ample supply of water rests their security against fire.

The Board also carried out the expressed will of the 17th General Assembly, by purchasing a Knabe Grand Piano for the use of the institution at a cost of five hundred dollars (\$500) delivered at the Asylum, the manufacturers kindly selling it at less than cost.

We also authorized the Superintendent to purchase milch cows for the use of the Asylum. We succeeded in getting nine, leaving a small balance of the fund on hands.

In April, 1879, Mr. J. M. Hiatt, President of the Board, resigned his position as Trustee, and Dr. S. B. Thrall, of Ottumwa, was appointed by the Governor in his place. At the first meeting thereafter D. M. Baker, of Chariton, was elect President of the Board.

During the present year we have been compelled to put new floors in some of the lower rooms, and have also purchased an excellent range for cooking, the facilities heretofore being very poor. The cost of these improvements were authorized by the Governor and Executive Council and paid by the State, there not being a surplus of the support fund to meet the cost of them.

A large amount of grading has been done under the supervision of the Superintendent, on the grounds around the buildings in order to render the place more accessible to teams and visitors.

This work has to a considerable extent been done by the pupils of

the Asylum, and with no additional expense to the State, while it has materially added to the beauty and convenience of the premises.

No additional improvements of importance have been made, not because there was no room or need for them, but for lack of the necessary funds, an obstacle difficult to overcome.

When the new Board came into office in 1878, they found about ninety-five (95) pupils in the Asylum; since then the number has increased to about one hundred and forty-five (145), and the result is that with the limited room at our command we find the Asylum is crowded to excess and constant applications coming in for the admission of new pupils. Of course new applications must be rejected, and this fact presents a grave question for the deliberation and action of your honorable body.

If the State of Iowa desires to carry out the benevolent doctrine she has always advocated and the liberality she has always manifested toward the unfortunate, she must face the topic of humanity and necessity, and devise ways and means to provide for them. Here is a class of children cursed from birth with the worst misfortune that can fall to the lot of humanity—feeble minds—mental imbecility, and too often without the shadow of a mind at all. No matter where they are they become burdens. Either they are burdens to their parents and guardians, who without school in their training and development, cannot do anything toward ameliorating their condition in life, or else they become the pauper charges of the counties wherein they reside, and the opportunities of life are closed to them there. Hence the necessity for such an institution as the Asylum for Feeble-Minded Children.

We are aware that many regard such an institution as an experiment, others who have seen them as they are conducted in this age of intelligence and humanity, realize that they are a stern necessity, and all know that they require vast amounts of money to sustain them and that money must come from general taxation.

The idiot can be trained and educated; this fact has been demonstrated in all the institutions of the country erected for their care. The wonderful success attending the labors of our teachers in this Asylum in patient teaching, has demonstrated this fact in Iowa. Many of them can be taught to be self-supporting and made to earn their livelihood, but it requires years for patient toil and instruction, and the facilities for reaching so desirable a result must be provided by the State.



Assuming that the State of Iowa intends providing permanently for this class, as her older sister states have done, you, as the law-making power of the State, must be the instrument through which the necessary assistance is furnished.

The urgent demands of the Asylum are more room and more land. The State should own and should devote to such an institution two or three hundred acres of good farm land. Here, we have, all told, but twelve acres of poor, worn-out soil, unfitted for the production of any class of vegetables. The land contiguous to it is rough, hilly, and timbered, and what a majority of the Board would pronounce unfitted by location and quality to ever make a good farm for the Asylum.

What is our remedy? A majority of the Board would recommend the removal of the Asylum to a more central portion of the State, in a rich, healthy locality, where a large body of good land can, be purchased at a fair price, and the Asylum located permanently, with a view to the best interest, not only of the pupils, but of the State.

The limited water supply is another permanent cause of objection to the present location. A steam engine must be provided for pumping water for our present use. At the present time all the stock on the premises are taken off the place for water, which is a source of much inconvenience, but it is the best that can be done.

The fuel used is exclusively wood, there being no coal in this part of the State. The Asylum uses several hundred cords of wood per year, and the amount will naturally increase as it grows older and larger. In a more central part of Iowa good coal could be procured at less than the fuel now costs. We invite your attention to this matter of location and ask you to give it grave consideration. If, on the other hand, the State considers it the better policy to retain the institution at this point, she should proceed without delay to purchase the land lying contiguous to the Asylum for farming purposes. It is not the best, it is true, but she must make the most of an imperative necessity.

There are a large number of boys in the Asylum who are able and willing to work, and under careful supervision can do good work, and help to a large extent to furnish the Asylum with all the necessary vegetables for its use. There is not a fruit tree, a fruit-bearing shrub or vine on the place, yet these are badly needed and pay well for their cultivation, and could be well cared for by the help that is kept at the Asylum. The Board could not provide for this careless omission or neglect of the primal occupants of the Asylum by having such things planted: because, first, we had no money with which to buy.

and secondly, the fence around the little pasture was so poor that it would not afford protection to the orchard. The first reason, however, we presume, is amply sufficient for our not having an orchard planted. The institution has never owned a team, though having urgent need for at least two. The Superintendent has generously furnished teams to do all the work of the Asylum, in return for which the Board have generously furnished the stable and feed for them. This has been quite an accommodation, as there never have been any funds out of which a team could have been purchased.

The health of the pupils of the Asylum up to this fall has been remarkably good, which we attribute largely to the excellent sanitary system adopted and enforced by the Superintendent, who is an experienced physician. Of late there has been considerable sickness among the low grades, but with the advent of cold weather, that will probably disappear. See Superintendent's report on sanitary condition.

All of the teachers continue to give the utmost satisfaction in their avocations, and the respect and affection evinced for them by the pupils, are a strong evidence that each one discharges her duties properly in laboring for the higher development of the pupils. The teachers have spent considerable time in some of the largest asylums of the country in acquiring the peculiar art of instructing feeble minds, and have so far proven a marked success.

Our present teachers are Miss M. Maud Archibald, Miss Jennie Van Dorin, and Miss Sabrina Archibald. Miss Cordelia Barr, Supervisor, has been temporarily filling the position of Miss Carrie Hayden, resigned.

Owing to the ill-chosen site of the Asylum, the Board were forced to purchase two acres of ground, lying contiguous to the old building, before they could begin the construction of the new one. The Superintendent, under the instruction of the Board, and with the advice of the Governor, made the purchase for one hundred and twenty-five dollars, (\$125) and advanced the money himself during the month of June, 1878, which money has not been refunded to him. We ask your honorable body to repay this amount justly due him, with interest.

We will say that the Asylum is in good condition, and in careful, conscientious, christian hands. The pupils appear to be happy, and regard it as their home, while every care and attention is shown them that is possible. Everything, in our judgment, is managed well, and the financial department, in the hands of the Superintendent, is

guarded with the greatest caution and prudence, and money spent with the utmost regard for a practical economy, as in fact is necessary in order to make the limited appropriations fulfill their purpose.

The support fund of ten dollars (\$10) per month for each pupil barely defrays the running expenses of the Asylum, never leaving a surplus. We are of opinion that that sum will continue to prove sufficient under ordinary circumstances, though the care required in watching and waiting upon a large number of little fellows, many of whom are physically helpless, is immense; but in order to make this meagre fund answer, it is but just to ask that your honorable body make special provision for the salaries. It is true that all the salaries in the Asylum are low, and yet the best of service is rendered; but it will become an impossibility for the Board to make ten (\$10) dollars per month for each inmate pay all of them, and properly support the pupils. We have been compelled to deny them the necessities in order to get through on the amount allowed, and keep out of debt, and have succeeded. Yet it is hardly just toward the pupils to draw from *their* support fund, as small as it is now, to pay the salaries of their guardians. We respectfully ask you to consider this question in a practical light.

More teachers are needed, there being but three to over one hundred and forty (140) pupils. One to every fifteen (15) pupils would be a better division.

Sewerage demands your attention, and is an important question. No matter where the Asylum is located, there must be some good system of sewerage adopted in order to insure a reasonable degree of health to the numerous inmates. All well-arranged institutions look at this subject with the degree of interest it deserves, as they should, if the life and health of the inmates would be protected. Here we have none at all; yet nothing is more conducive to good health than good sewerage.

The laundry is entirely too small for the large number of children in the Asylum, and so far the washing and ironing has all been done by hand. We need a drying-room, a larger ironing-room, and more room for washing, and apparatus for doing the work by steam. We have none of these conveniences notwithstanding the large number of persons in the building. A good fence around the entire premises is badly needed and we would suggest that your honorable body grant the necessary funds for constructing it.

An oven for baking is another much needed and economical comfort, which the Asylum needs. At the present time and ever since the Asylum was opened the bread for the inmates has been purchased from the bakeries, owing to the want of funds with which to construct an oven. A very large saving would be made in the cost of bread if this could be remedied.

A corridor is needed to connect the new building with the main one, by which the pupils can be protected from the inclement weather in going to and from the respective buildings. A team of good horses or mules and a two-seated spring-wagon should be purchased for the use of the Asylum.

The facilities for bathing are very poor, there being no bath-house, and tubs alone being used for the want of better accommodations.

The main building is in need of repairs, the plastering is falling off in many places, the roof leaks, and some of the old floors are rotting away. The water supply we have heretofore mentioned, and if the institution remains located at this point, it becomes a matter of vital necessity for the protection of the State's property, that an ample supply of water be furnished, this, in our judgment, can only be done through the agency of a steam engine.

A new building is needed to give more room. Some thirty more pupils than ought to be here, are provided for under many and serious inconveniences and at least fifty have been rejected for want of ample accommodations and no others can be admitted until more house-room is secured.

If the General Assembly design its benevolent and humane institutions for all who stand in need of them, it must provide accommodation for their reception.

At least ten (10) more good milk cows are needed; the present number, nine (9), being insufficient for the wants of the Asylum.

The average cost of the past two years for conducting the entire institution, including every expense item not made out of the special funds is about eleven dollars (\$11) per month, each pupil, which we submit to your honorable body, is an economical showing, highly creditable to the management of the Asylum.

The cost of maintaining pupils in similar institutions in other states we gather from the reports is as follows:

In Ohio from sixteen (16) to twenty dollars (\$20) per month each. In Illinois twenty-two and a-half dollars (\$22.50), New York sixteen dollars (\$16), Pennsylvania training-school twenty-three dollars (\$23),

and in Europe at similar institutions about sixteen dollars (\$16) per month.

We estimate the salaries of officers and all hired help for the next two years at \$7,590, which, considering the fact that we have an increase of room and a corresponding increase of pupils, will be a very reasonable amount.

The desirability of heating the building by steam is another interesting item for your consideration. It would dispense with the stoves, and lessen the danger to the pupils of meeting with accidents, and would very much diminish the danger to the building of catching fire.

In conclusion, the Board feel under great obligations to past General Assemblies for the aid rendered the institution; also to the Superintendent, Matron, and teachers for the excellent manner in which they have looked after the interests of the Asylum; also, to the public generally for the kind consideration they have exhibited toward this institution, which has already attained an honorable name and distinction among our sister states. We urgently insist upon the members of the General Assembly that they visit it in person, if time permits, and see for themselves the good work that is being done in behalf of this, the most helpless class of mankind. To a stranger at such an institution it is a revelation—to an experienced teacher, a positive delight.

We herewith submit a carefully prepared estimate of the necessary money required for the use, improvement, and maintenance of the Asylum for the next two years, and leave the final disposition of it to your best judgment, hoping that the institution will receive the degree of consideration its importance demands, and happy progress it so justly deserves.

#### ESTIMATES FOR THE NEXT TWO YEARS.

Corridor.....	\$ 500 00
Barn for cows.....	800 00
Ten (10) cows.....	300 00
Money advanced by Dr. Archibald for land.....	125 00
Team and buggy.....	450 00
Repairs on old building.....	1,500 00
For heating buildings.....	3,000 00

Additional water-supply.....	\$5,000 00
Cistern, 1,000 barrels.....	550 00
Sewerage.....	1,500 00
Oven.....	250 00
New furniture, beds, and bedding.....	2,500 00
Grounds for farm and yard.....	4,000 00
Fencing.....	1,000 00
School apparatus and books, etc.....	650 00
Salaries.....	7,590 00
New building.....	
Total.....	<u>\$29,715 00</u>

All of which is respectfully submitted.

D. M. BAKER, *Pres. of Board.*  
E. R. S. WOODROW, *Treas.*  
S. B. THRALL.

*Glenwood. Iowa, Nov. 5, 1879.*

## MINORITY REPORT OF RESIDENT TRUSTEE.

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IN regard to the removal of the Institution for Feeble-Minded Children, located at Glenwood, Iowa, I desire to state that so far as good farming land is concerned, we can purchase all that is required at a cost of from thirty (30) to forty dollars (\$40) per acre, and that the quality of the land is such that it will produce from forty (40) to fifty (50) bushels of corn to the acre, every year that is at all seasonable.

There are eighty-six (86) acres of land adjoining the city of Glenwood, with considerable improvements in way of fencing, good house, and an orchard on the same of two hundred (200) young, thrifty apple trees, which can be bought at a cost of thirty dollars (\$30) per acre. Ten acres intervening between the above farm and our premises can be purchased for forty dollars (\$40) per acre. Through this land a living stream of good water flows the year round, which is quite an object for the use of stock. There are also sixteen (16) acres of good timber on the above land which can be utilized to great advantage for use of the Asylum.

As to the matter of fuel, we can obtain good, hard wood for two dollars and fifty cents (\$2.50) and three dollars (\$3) per cord, which, in my opinion, is cheaper than if we were located in a section of the State where we would be compelled to resort to the use of coal.

By the use of sufficient cistern capacity to save the waste roof-water, and a good, substantial steam pump for raising water out of the well, and larger tank-room for its reception, we would be amply supplied for all purposes, and at the same time it would render us protection from fire.

While I heartily concur in the report of the majority of the Board of Trustees as to the wants, management, etc., of the institution, I feel that I am compelled to thus dissent from their opinion in regard to its removal, upon the grounds of insufficient farm lands, ample water

supply, and cheapness of good fuel, etc., to say nothing of the healthfulness of this locality, which is a very important consideration in the establishment of any institution, and especially is this desirable for the protection and care of *this* class, who at best are enfeebled both physically and mentally.

Respectfully submitted.

E. R. S. WOODROW, *Trustee.*



## REPORT OF THE SUPERINTENDENT.

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IOWA STATE ASYLUM,  
FOR FEEBLE-MINDED CHILDREN, }  
October 1, 1879.

*To the Board of Trustees:*

GENTLEMEN—In obedience to law, I herewith respectfully submit for your consideration the second biennial report of the condition of this institution.

It is a source of much gratification to observe the advance in public sentiment upon this important subject of educating the feeble-minded and preparing them for usefulness through life.

Christianity and civilization have too deeply and affectionately blended themselves in the hearts of men, for any given class of unfortunates to remain long in darkness, suffering, or want.

The time has come when all enlightened and good people must watch carefully the needy and unfortunate, and not only provide for their necessities, but investigate and *prevent*, if possible, the causes which bring about these lamentable results.

Since September 1, 1876, a little over three years, at which time this institution was organized and opened for the reception of pupils, there have been admitted one hundred and sixty-seven (167) pupils. Of this number, eighteen (18) have been private, and one hundred and forty-nine (149) supported by the State.

They were received from the following counties, as follows, viz:

COUNTIES.	No.	COUNTIES.	No.
Appanoose . . . . .	1	Jackson . . . . .	1
Black Hawk . . . . .	3	Keokuk . . . . .	3
Bremer . . . . .	3	Lee . . . . .	2
Benton . . . . .	5	Lucas . . . . .	2
Buchanan . . . . .	1	Linn . . . . .	4
Clayton . . . . .	5	Muscatine . . . . .	9
Cedar . . . . .	3	Madison . . . . .	3
Crawford . . . . .	1	Mills . . . . .	11
Clinton . . . . .	3	Mahaska . . . . .	2
Dubuque . . . . .	5	Montgomery . . . . .	2
Des Moines . . . . .	5	Mitchell . . . . .	2
Delaware . . . . .	3	Monona . . . . .	1
Dallas . . . . .	7	Monroe . . . . .	1
Davis . . . . .	1	Marshall . . . . .	2
Floyd . . . . .	3	O'Brien . . . . .	2
Fremont . . . . .	1	Polk . . . . .	3
Fayette . . . . .	3	Pottawattamie . . . . .	7
Greene . . . . .	1	Poweshiek . . . . .	2
Guthrie . . . . .	4	Scott . . . . .	5
Harrison . . . . .	5	Tama . . . . .	2
Humboldt . . . . .	1	Taylor . . . . .	4
Henry . . . . .	2	Wapello . . . . .	3
Howard . . . . .	1	Washington . . . . .	2
Iowa . . . . .	2	Winneshiek . . . . .	3
Johnson . . . . .	2	Wayne . . . . .	2
Jasper . . . . .	2	Winnebago . . . . .	1
Jones . . . . .	1	Webster . . . . .	2
Jefferson . . . . .	5	Warren . . . . .	1
Total . . . . .			164
FROM OTHER STATES.			
Leavenworth county, Kansas . . . . .			1
Scott county, Minnesota . . . . .			1
La Porte county, Indiana . . . . .			1
Total . . . . .			3
Grand Total . . . . .			167

Of the above number, one hundred and nine (109) were males, and fifty-eight (58) were females.

There have been eighty (80) admissions since our last biennial report, fifty-six (56) males and twenty-four (24) females.

Fifteen (15) have been discharged—seven (7) boys and eight (8) girls, and nine (9) greatly improved; three (3) of them learning to read and write, so that they could write intelligent and legible letters to their parents, and one (1) so advanced that she now attends the district school and is improving nicely in her studies.

Previous to their instruction in our school, it was impossible to gain their attention for any great length of time, and they were entirely unacquainted with the alphabet.

In the two years just ending, six (6) have died, four (4) boys and two (2) girls, leaving in the institution at the present time, one hundred and forty-four (144); ninety-eight (98) males and forty-six (46) females.

Upon the whole the health of our children has been exceedingly good, considering their enfeebled condition at best, and for this blessing we have great reason to be thankful.

The deaths which have occurred during the last biennial period resulted from chronic disorders, contracted before their admission into the institution, two of them only living a few weeks after being received; cause of their deaths being pulmonary tuberculosis.

Two died of epilepsy, and two of chronic ulceration of the stomach and bowels.

The above cases were objects of the greatest pity, and though one's sympathy goes out towards one of these little beings in human form, when death claims them just the same as though they were of a higher order of intelligence, yet we cannot but feel thankful that they are sufferers no longer.

Three (3) of them were effected with low congenital idiocy, and the other three (3) had been afflicted with epileptic convulsions from infancy and were rendered so feeble, mentally and physically, that life became to them burdensome rather than otherwise.

The several appropriations made by the last legislature have been wisely and judiciously expended for the purposes for which they were intended, under your direction.

The thirty-five hundred (\$3,500) dollars for gymnasium, school-room and dormitories were insufficient to put up a building equal to the urgent demand; but we have a house two-stories high and sixty (60) by thirty (30) feet—the lower story affording a pleasant gymnasium and two (2) small school-rooms. The latter are entirely too small, but we were compelled to regulate their capacity by the number of dollars allowed for constructing the building. The upper story is divided into three sleeping apartments which are used for our largest classes of boys, and better enables us to separate the sexes than when we had only the old building for all purposes. The building is of brick and is a substantial and well arranged house, and presents quite an imposing appearance, situated as it is on a very pretty eminence at the rear of the old building, at a distance from it of twenty-five (25) yards. The old building is so located that it was impossible to join the new one to it, and it will be necessary to connect them by a corridor in

order to make it finished and comfortable for our feeble children to pass between the school-rooms and the main building, and will require an appropriation of about five hundred dollars for that purpose.

In order to have land belonging to the State that would be suitable for the new building site, I purchased, as you know, two (2) acre lots at a cost of one hundred and twenty-five dollars (\$125) and deeded them to the State. Without doing this we would have been obliged to postpone building until the meeting of the legislature, which seemed impossible. It was positively necessary for the State to own the land referred to, leaving out of consideration its needs for new building, as it included part of our door-yard and old barn and hog-yards, as also the ground where the water-tank had to be placed.

A Grand Knabe Piano has been purchased at a cost of five hundred dollars (\$500) for use in gymnasium, the manufacturers donating quite a large sum after deducting their profits—the list price being fifteen hundred dollars (\$1,500).

A barn, at a cost of about three hundred and seventy-five dollars (\$375), has been erected, which furnishes a comfortable shelter for four (4) horses and room for several tons of hay, bins for corn, bran, etc. The remainder of the five hundred dollars (\$500) for barn and fence was expended in putting a barbed wire fence around the fifteen acres which has been used for pasturage for cows. It has answered a purpose, but proves very unsatisfactory, as two or three of our cows have been seriously injured; also a good horse.

An old stable was burned on the 5th of October last, but fortunately it contained nothing of value. The origin of the fire cannot be ascertained, and the loss was about forty (40) or fifty dollars (\$50)—“*no insurance.*” The wind was blowing briskly at the time in the direction of the new barn, and it was with the greatest difficulty that we saved it from the same fate. If we had failed in this, in all probability the water-tank and gymnasium would have been burned. In fact it seemed for a while as if *all* of the buildings were doomed to a like fate, and it was only by the efficient use of a large number of fire-buckets that we were enabled to save the other buildings.

The loss of the barn, cheap though it was, leaves us entirely without shelter for our cows and storage room for oat straw, so necessary in the institution, for beds, etc.

An appropriation of at least one thousand dollars (\$1,000) will be required to build a new one equal to our present demands.

Ten cows have furnished us an average of ninety (90) quarts of milk per day during the past twelve months, which, at a cost of five (5) cents, amounts to sixteen hundred and forty-two dollars and fifty cents (\$1,642.50), which has been a great saving and proven a great boon to our helpless family in way of diet, and almost entirely taken the place of tea and coffee, besides being very much better suited to the digestion and feeble nervous systems of these children than either.

I would respectfully ask an appropriation of three hundred dollars (\$300) for the purchase of—say ten (10) cows, which would then furnish us with an ample supply of milk for all, and would enable us to furnish our own butter, and would soon save enough to pay for said number of cows. If we could have a competency of milk for all our children, less butter would be needed.

In calling attention to our numerous wants, it would not be in good taste to omit mentioning the fact that a team has never been purchased for the use of the Asylum, and for the three years ended, that duty has fallen upon the Superintendent. As you are aware, there never has been an appropriation that could be used for that purpose. On account of the fact that water had to be hauled from the adjoining town for the first two (2) years, together with the grading made necessary by erecting the new buildings during the past year, we have been compelled to keep two (2) teams the greater part of the time.

A two-seated carriage or buggy is also greatly needed about an institution of this kind, situated as we are some distance from town. Four hundred and fifty dollars (\$450) will supply this demand.

The old building has undergone considerable repairs, but it at present requires repairs to the amount of one thousand dollars (\$1,000) in order to have it in a comfortable and presentable condition. The old floors are badly worn, and must be replaced by new ones. The plastering is continually falling off, and all of the rooms in the old building ought to be replastered. The wood-work is also suffering for paint. The first law of economy is to preserve, hence I take the liberty to call attention to all the little necessary repairs pertaining to our premises.

Fifteen hundred dollars (\$1,500) will be really required for the necessary repairs on building for the next two years.

The heating of the building by steam ought to enlist your most earnest endeavors. At present stoves are the only means of warming, and owing to the enfeebled condition of many of our inmates, they are not safe.

Children, especially of the lower grades, and epileptics, are in danger of falling or being pushed against the hot stoves and receiving serious injuries. Arrangements could be made for heating the buildings by steam at no great cost, and besides, the steam could be utilized in pumping water and for laundry purposes. At present all of our washing and ironing has to be done by hand, and it is no small task for so many children of this class.

The building erected for laundry purposes does us good service, considering that previous to securing it we only had a wood-shed; but I am sorry to say that even now we are greatly inconvenienced by lack of room, and the present accommodations can only answer temporarily, owing to the rapid increase in number of our household. A terrible inconvenience in connection with this department is the want of a drying-room. The matter of having our clothes dried out of doors on lines is impossible during bad weather, and at that time the greatest inconvenience, both to wearing apparel and bed clothing for our children, is experienced. We are in great need of a more capacious building for laundry purposes, and the present building could be used quite satisfactorily for other much needed conveniences.

The matter most requiring your attention, however, is that of a water supply. We demand this for the preservation and safety of our property and helpless family. In case a fire should break out, we are utterly helpless and must only suffer the destruction of our buildings, and possibly some of our inmates. The present supply is scarcely sufficient for daily use in the institution. We are comparatively well

provided for, however, in this respect, by using the strictest economy in every department. Our whole supply being from one well, one hundred and twenty-five (125) feet deep, and a wind-mill the only means of pumping, which during three (3) or four (4) months of the year fails to perform its work, it requiring quite a rapid wind to pump from a well so deep. At times, too, the *well* fails, and for several hours at a time we have been without water on the premises. One other well, and a water-tank that would hold about one thousand (1000) barrels, and sufficient hose and pipe connections to different parts of the building, would render us comparatively safe from fire. I deem this matter of the gravest importance. When you consider my responsibility of having in charge one hundred and forty-two (142) helpless children in various departments, with no easy way of escape, and no possible means of extinguishing a fire should one occur, you will not wonder at my earnestness in this matter.

This water question brings us to another requirement, almost of as much, if not more, importance; and that is *water-closets* and proper *sewerage*. At present the use of buckets placed in boxes is the only convenience, which discomfort is almost unendurable, notwithstanding flues have been established in connection with them. These buckets have to be emptied into a cess-pool, which sooner or later endangers the health of our household, by poisonous and organized matter finding its way into our wells, and by the gases escaping and entering our living apartments. It requires the utmost thoughtfulness, as well as caution, that the sanitary condition of this institution may not become involved. I live constantly in dread of the direst consequences resulting from either one or the other of the above sources. It has been proven beyond a doubt that the gravest cases of pernicious intermittent and typhoid fevers, neuralgia, diptheria, rheumatism, chest inflammation, etc., are results of exposure to this dreaded *carelessness* if you please, and especially is this true in cases of children predisposed to scrofula.

Waring well says, in referring to this important problem, and they are the difficulties we will have to contend with unless secured against them by proper sewerage, that to realize the best sanitary results it is positively necessary to observe the following precautions, viz:

"1. To secure (his) house against excessive dampness in its walls, in its cellars, and, when practicable, in its surrounding atmosphere.

"2. To provide for the perfect and instant removal of all manner of fluid and semi-fluid organic wastes.

"3. To provide a sufficient supply of pure water for domestic use.

"4. To guard against the evils arising from the decomposition of organic matter in or under the house.

"5. To remove all sources of offense and danger which may affect the atmosphere about the place.

"6. And (almost more important than all of the rest) to prevent the insidious entrance into the house, through communication with the sewer, cess-pool, or vault, of poisonous gases, resulting from the decomposition of the refuse of (his) (our) own household, or of the households with which a common sewer or drain may bring (him) in communication."



Since the number in the institution increased to its present magnitude this difficulty has become more prominent, and will steadily increase till remedied. I feel assured that what illness we have experienced during the last few weeks is chargeable to this cause. During the month of September several cases of typho-malarial and typhoid fever have occurred, the first cases of severe sickness since the opening of our Asylum. This early experience has been so direct and so positive in its teachings, that a failure to regard it properly would be criminal.

With the number of feeble children in our institution it would seem impossible to do without a well-arranged system of water-closets and the necessary sewerage to carry off everything that might have a tendency to engender disease. The length of sewer necessary to empty into Keg Creek is thirteen hundred (1300) feet, and the cost of pipe six (6) or eight (8) inches in diameter, at eighty (80) cents per foot, together with the expense of laying the pipe, will require an appropriation of about fifteen hundred dollars (\$1500). A nine (9) or ten (10) inch sewer-pipe is large enough for any institution with a reasonable amount of fall to free itself, and with considerable fall, such as we have here, a smaller size could and *should* be used. Just in proportion as the size of a house-sewer is increased so is the danger of poisoning by sewer-gas increased. The sewer and water-closets cannot be utilized to advantage without an abundant supply of water. It is useless for me to urge further the great *necessity* for these improvements, for each of you, no doubt, has long since seen and felt the necessity for the same, from observation during your frequent visits to the institution.

The new range and hot-water boiler are giving splendid satisfaction, and the new floors in the kitchen, with the old partitions removed, render this apartment quite comfortable, and enable us to prepare our food promptly and well.

Previous to this much-needed improvement it was with great difficulty that we could have a sufficiency properly prepared.

We feel under obligations to Gov. Gear for relief rendered us in this department. The use of hard water in our range has caused us some trouble on account of the lime deposits in the pipes, cutting off the water-supply from the "fire-backs" and causing them to burst. If we could have soft water to use, even occasionally, this difficulty would be remedied. An appropriation of about six hundred dollars (\$600) is the estimate for building a cistern that would contain one thousand (1,000) barrels of water. Nearly all of the roof-water is wasted for want of cisterns to save it. This is an urgent need, as rain-water is so much better suited to laundry purposes, the well-water being so "hard" that it requires large quantities of potash to render it fit for use, and increases the expense.

Since writing the above we have had an explosion of "water-back" in range, which if it had occurred one-half hour later might, and in all probability *would*, have resulted in the death of two or three or more of the hired help and children; but happening as it did before the cooks had commenced preparing breakfast, no serious consequences resulted from it farther than damage to the range. The water-back was a new one, only having been in a few days, but the pipes leading

from the boiler had become so stopped with lime that the water circulation was obstructed and the rapid generation of steam resulted as described. As this is the only means of heating water for dish-washing, cooking and cleaning purposes, it becomes an urgent necessity, both for convenience and safety to our people, that this danger and hindrance to our cooking convenience shall be remedied.

The one thousand (1,000) barrel cistern that your attention has already been called to, and a small tank for the reception of soft-water, would remedy this evil and also give us soft-water for other purposes so much needed.

One other improvement is greatly needed, that of an oven for baking bread. At present we are dependent upon the city bakery. To bake our own bread would prove much cheaper and more satisfactory, as there are so many articles of food that can be baked if we have an oven. About two hundred and fifty (\$250) dollars would build an oven sufficiently large for our needs.

The furniture purchased for the institution three (3) years ago was of necessity of a very cheap kind, and during the past two (2) years, outside of carpets, beds and bedding, very little has been purchased. New carpets will again be needed, and considerable bedding, and new bed-steads ought to be provided, and new furniture for several rooms. An appropriation of at least twenty-five hundred (\$2,500) dollars, for the most urgent demands in this department, will be required.

A fence, at a cost of five hundred and fifty (\$550) dollars, is greatly needed around the buildings, the present one being so old and broken that it refuses protection to our grounds from stock of all kinds running at large, and thus affords a source of great annoyance and damage.

It undoubtedly has been quite apparent to each of you during your frequent visits to the institution, that the Asylum ought to own all of the land intervening between the building and the road on the north, including even a part of the door-yard in front. These grounds are indispensable to the institution for walks and pleasant resorts for the children, and unless purchased the coming year they will be fenced and used for pasture, not only rendering it obnoxious by having our front door-yard occupied by cattle and horses, but will have the premises gracefully ornamented by a rude irregular barbed-wire fence, a fair sample of which ornamentation already presents itself in the huge oak posts already set. This ground also includes the only outlet, by wagon-road, from the Asylum. At the earliest day possible I will furnish you with the number of acres in said grounds, with the lowest cash price that will purchase them. On account of this being owned by so many different persons and in such small lots, this information is difficult to obtain. In addition to these front grounds of timber needed for play-grounds, at least forty (40) acres are required for a cow pasture. The twelve (12) or fifteen (15) acres owned by the institution at present ought to be used for garden and small fruit purposes. By securing the front grounds and placing around them and the land now owned by the State a high substantial board fence, we would not only have good airing grounds for our children, but it would protect us from the annoyance by stock, and give a much better appearance to our surroundings.



Whilst I have done all in my power to utilize the labor of our feeble boys, and spare time of attendants in beautifying our grounds, it is impossible to accomplish what is required without some means to build fences and add other needed improvements. It is surprising to see the amount of earth our feeble boys have removed, which not only adds beauty to our grounds, but stimulates them to industrious habits and develops their enfeebled minds and bodies, thus rendering them happier, and each day more useful.

The day is not far distant when a farm will have to be purchased to furnish employment to the boys of the institution, and in this way a large percentage of them are made self-sustaining. Farming seems to be better adapted than any other form of labor to our children, under the direction and guidance of a good instructor. It is true that work-shops of various kinds have been established in connection with institutions of the older states, and wonderful efficiency attained in brush and broom making; manufacturing chairs, boots and shoes, carpenter work, etc., but the experience of all similar and older institutions is that farming is the most beneficial, profitable and satisfactory. All the arguments I shall at present use in favor of suitable and arable farming lands in connection with this institution, will be to add a few extracts from letters received from the following gentlemen, who have had a large experience in older institutions:

Dr. H. B. Wilbur, who has been superintendent of the New York Asylum for Idiots for over twenty-five (25) years, says, in answer to inquiries regarding this matter:

"I still believe that farming and gardening occupations are the best forms of employment for persons of deficient intelligence. There are such a variety of occupations, many of them requiring no dexterity, and not very much judgment, that they are especially adapted to the class of cases with which we deal. Then an institution furnishes a market for the productions of the farm and garden.

"It is hardly necessary to add that in an agricultural state, the reasons for preferring agricultural training to teaching pupils a trade, are all stronger than in any others.

"It seems to me that when custodial institutions shall be established for idiots, farming and gardening will be the principal occupation for the males."

Dr. I. N. Kerlin, of Media, Pa., writes:

"We made a mistake in the location of our institution. Beautiful as it is, it has been a severe drawback on us not to have had arable land, and enough from the beginning. After twenty (20) years of hard work and considerable outlay, we rejoice in a tolerably productive farm, made so by dint of industry, utilization of our own waste, and not least of all, the hard work of our large family of feeble-minded boys.

"We bought seventy-five (75) acres at first, but our increasing need for water facilities, the importance of keeping bad neighbors at a distance, and lastly, a growing class of boys, who were found to be best employed at gardening and farming, have been circumstances which

have led to the purchase of pieces of ground from time to time, till now we have over one hundred and thirty (130) acres, much of it purchased at disadvantageous prices, as compared with what it would have cost us to have located in a well-watered, arable, and ample section at first.

"I have given this experience of an older institution, which may serve as a lesson to your younger enterprise, and will add that it is my judgment—1st. That farm life and its avocations are best adapted to the training of feeble-minded persons. 2nd. That you should not start in Iowa with less than one hundred (100) acres of ground suitably located. 3d. If your institution grows into the proportions of those of older states, you will come to the place when you will regret that you have not two hundred (200) acres, as well for the proper classification and separation of grades of imbecility as for the utilization of their hands."

Dr. Doren, of the Ohio institution, at Columbus, whose experience has extended over a period of twenty years, adds the following, viz:

"I fear that if I state the amount of land you should have, my statement will be regarded as extravagant and go for nothing. I will remark, however, that we own about two hundred (200) acres, and that we use over one hundred (100) more that we rent, and that we could work as efficiently and as profitably five times as much with the labor we have in the institution [about 450]. I mean the kind of cultivation you have seen here. We raise all of the vegetables used in the house, of variety and quality that cannot be bought; all the food for stock, and, with more land, could furnish all of the stock for use, to say nothing of grain. My advice, therefore, is to get one hundred acres (100) if possible, and take more if you can get it. Yours is and *will be* an agricultural state, and you should train your children to that kind of work. They will make efficient workers, and can show a model farm, as well as profitable one. The truth is, the entire product of the farm is clean gain to say nothing of its sanitary influence upon your household, in its improved dietary, and the beneficent effect of labor. for you will have a class in this department of training that you will fail to reach otherwise, and you should be supplied with complete facilities in that direction quite as carefully as in building or school appointments."

To the foregoing testimony may be added the following pointed remarks from Dr. Wilbur, of Lincoln, Ill., viz: "I would have all the land I can get. You can utilize all the large boys after they graduate from the school-room."

The foregoing letters in regard to the matter of training our boys in agricultural pursuits, and the amount of land required for the efficient performance of the same, coming, as they do, from gentlemen having large experience in connection with the largest institutions in this country, are worthy of careful consideration. After three (3) years' experience and observation, I am compelled to add to those observations the opinion that this institution will be greatly benefited and its good results promoted by an early acquisition of good farming land to the amount of at least one hundred (100) acres. The grand ultimate

object of all of our school training, is to improve and develop the mental and physical condition of these unfortunates, that they will be made useful, and at the proper time become self sustaining; and there seems to be no more appropriate and profitable pursuits for them than those we have referred to, that insure to them invigorating exercise so conducive to good health, and secure to our tables a bountiful supply of vegetables at trifling cost.

The fact that during the brief history of this institution, there have been one hundred and sixty-seven (167) children admitted, and some seventy (70) others refused admittance for want of room, shows the necessity for greater action in this direction, and has already demonstrated the fact that this noble and philanthropic work was begun none too soon.

Prospective of the future demands of this institution, say fifteen (15) or twenty (20) years hence, in a growing State like Iowa, with its rapidly increasing population, we should use the greatest caution and judgment in our plans for securing lands and locating buildings for a permanent institution that will prove a credit to our commonwealth and secure to all its people the greatest good for which it is designed. And unless judicious action is taken in these particulars, now, at the beginning, we, and those who shall succeed us, shall ever labor under difficulties and embarrassments of the gravest character.

We deem, then, that *plenty of good tillable land, with good water supply, easy of drainage*, and so located as to be most *eligible and convenient* to the greatest number of its patrons, are the most important matters to be taken into consideration in the permanent location of an institution of this kind, when we know almost positively (if experience of older institutions is any guide for the future) that in the short space of ten (10) years, at most, provisions for at least three hundred (300) feeble-minded children of teachable age will have to be made.

This philanthropic enterprise continues to claim from the people of our State an increasing appreciation of its well-earned merits, and we feel encouraged to believe that the long felt necessity for a more capacious and improved edifice, will engage your earnest attention, and lead you to solicit an appropriation for a new building.

The old house which has done good service for the purposes for which it was designed, viz: to provide a home for soldiers' orphans, is wholly unfitted for the proper care and training of the present number of feeble-minded and imbecile children under our charge.

The Board cannot fail to see that the large number admitted since our last report, and a continuance of such increase, *demand*, not only a large edifice, but more teachers, suitable apparatus, and appliances for the efficient performance of this noble work. Our school-rooms are entirely too small, and our day and sleeping apartments too crowded and few in number to healthfully and comfortably accommodate our present number of pupils.

The great number of pressing admissions into our institution is of itself sufficient to show that the establishment of this institution provided for a felt want, and now that the discouragements connected with its opening and earlier history are nearly lost sight of, its friends are justified in indulging the hope that the object for which the Asylum was established will be fully realized, and the interests bettering

the condition of the imbecile, so conducive to the advancement of society by its means, will be materially advanced.

As I have heretofore stated, the institution is crowded to its utmost capacity, and applicants are still pressing for admission. With a better acquaintance with the results accomplished here this pressure increases, and the accommodation of applicants is to us an important problem.

The chief matter to be taken into account, therefore, in connection with the subject of better accommodations, is the number of imbecile children in the State.

From investigations on this point, believed to be thorough and reliable, it appears that the proportion of imbecile children in the State incapable of instruction by the ordinary means is at least one (1) to every thousand (1,000) inhabitants.

Estimating from the population of 1875 this would give about one thousand three hundred and fifty (1,350), of whom, at least one-fourth, might and ought to be educated in an institution of this kind up to various degrees of intelligence and productive industry. This estimate would suggest buildings of a capacity suited to accommodate three (300) or four (400) hundred pupils.

I feel, however, that it would, for various reasons, be considered as unreasonable to ask the legislature to provide, at present, for buildings of this capacity, and therefore shall not recommend the same; but content myself with hoping that they will at least contemplate this as an ultimate object to be attained, when the efforts made in behalf of these unfortunate children shall be more fully understood and appreciated by the public.

Accommodations for at least two hundred and fifty (250) pupils, however, are at this time imperatively demanded, to meet the many urgent appeals that come to us from all quarters, and until the erection of new buildings we shall still have to lament the want of facilities for the proper classification of our pupils. Our condition in this respect is very serious indeed, and we feel it still more deeply as our pupils progress.

It is manifestly improper to associate those who are improving satisfactorily with pupils recently admitted. They must necessarily deteriorate more or less; children admitted vary in age as well as capacity, and it is a defect of no slight importance, in our organization that requires the child of six (6) or seven (7) to be exposed to the influence of those recently admitted who may be sixteen (16) or seventeen (17).

Of the great importance of keeping the sexes properly apart, and the much needed room for hospital purposes, I have said nothing, and must make a general statement suffice.

At present our only convenience for bathing our children is in small tubs—movable from one room to another—and children's play-rooms have to be used for this purpose, and water carried in buckets to and from the tubs. No one knows the inconvenience of this one necessity, because if bathing in an institution of this kind is not a *virtue*, in the strictest sense, I am at a loss to know where in the course of human economy virtue is to be located. To bathe one hundred and forty (140) children once or twice a week with such *inconveniences* is no small matter. For the sake of Godliness, by way of cleanliness, give

us a house, water, and bath-tubs to make our children cleanly and surround them by wholesome and sanitary influences.

To show satisfactorily to the legislature exactly what our requirements will be for the next biennial period for salaries and wages, I will give the number of employes in each department, with their respective salaries.

The following are the number during the biennial term just closed, but to successfully and efficiently accomplish the ends for which this institution is designed and to do justice to our children, both in and out of school, we need at least two (2) other teachers and two or three (3) other attendants. At present our day and school-rooms are overcrowded, rendering our labors less efficient and our household more liable to sickness than it otherwise would be.

EMPLOYES.

NAME.	Male.	Female.	Total.	Salary per month.	Aggregate.
Superintendent.....	1	..	1	\$100 00	\$100 00
Matron.....	..	1	1	33 33	33 33
Teachers.....	..	3	3	30 00	90 00
Assistant Teacher .....	..	1	1	20 00	20 00
Housekeeper .....	..	1	1	15 00	15 00
Supervisor.....	..	1	1	15 00	15 00
Clerk... ..	1	..	1	35 00	35 00
Seamstress.....	..	1	1	15 00	15 00
Nurse.....	..	1	1	15 00	15 00
Attendants.....	2	5	7	{ 20 00 and 12 00	100 00
Cooks.....	..	2	2	12 00	24 00
Ironing girls.....	..	1	1	12 00	12 00
Laundress .....	..	1	1	14 00	14 00
Dining-room manager .....	..	1	1	12 00	12 00
Night-watch.....	1	..	1	20 00	20 00
Out-door and all-work.....	2	..	2	{ 20 00 and 18 00	38 00
Total.....	7	19	26	.....	\$558 33

In regard to asking appropriation for the support of this institution during the next two (2) years, I desire to estimate as closely as it is possible without detriment to our helpless children, or in any way interfering with the progress and efficiency of our schools and institution. I am sure I do not wish more than is rightfully needed for the comfort and proper dietary of our household. I know that it is right and proper that the strictest economy should be observed in all of our public institutions, but we must not be economical to the detriment, discomfort or injury of our children. While the latter have been comfortably cared for, and all sufficiently well nourished with plain substantial food, yet I have often wished



that I could have had a more liberal diet, by way of changes in fruits and meat, etc. We have given them the best we could afford without incurring any debt against the institution. It has been a severe struggle to accomplish this end and place the institution free from any incumbrance whatever. The average number of pupils present per month during the two years ending is one hundred and nine (109). The average amount expended per month, salaries included, for the two years, for support, is eleven hundred and ninety-nine (\$1,199) dollars, or eleven (\$11) dollars per month per capita. When we consider that other similar institutions in other States show an expenditure of from twenty (\$20) to twenty-two (\$22) dollars per month per capita, we feel that we have not been extravagant, at least.

But whilst we have economized and even scrimped in order to make both ends meet, we sincerely hope and trust that the legislature will not refuse us a sufficiency to make the institution what it ought to be, and one that will prove a credit to the State.

The sudden and rapid increase in prices of nearly all kinds of provisions, clothing, etc., will necessitate an increase of expenses during the next two years over the last two, leaving out of consideration the fact that our children ought to be a little better fed and greater provision made by way of extra teachers, attendants and nurses. Any one who knows anything about this class of children is well aware that it requires more help to care for the same number than if they were intelligent, cleanly and physically strong. On an average an attendant ought not to have more than fifteen under his care, and this same rule should apply to teachers.

I would name seven thousand five hundred and ninety-one (\$7,591) dollars as the *least* sum required for salaries for the next biennial period.

You will perceive that I have called your attention to quite a number of needed improvements, but none of them that will cost a large sum of money, and the aggregate will cost comparatively little.

Having daily to suffer the *inconvenience* and *need* of improvements, to which I have called your attention, I do this latter because I deem it my special duty in behalf of these unfortunate children, to at least place before you some of the most urgent demands and requirements of our institution, and if in your judgment you deem these requisitions needful, and the institution worthy, I would respectfully ask the Board to present our claims to the legislature for its careful and just consideration.

With regard to the special instruction which is given our pupils: they all assemble in the gymnasium where they engage in singing and devotional exercises for twenty minutes, and then proceed to their respective rooms where they are placed under special training, from four (4) to six (6) hours daily, in the various school exercises peculiar to the teaching of this class of pupils.

A short statement of the grades will give some idea of the nature and progress of our school work:

## GRADE A.

MISS JENNIE VAN DORIN, TEACHER.

*Twenty-nine pupils enrolled—sixteen boys and thirteen girls.*

All in this grade can talk excepting one little girl, who can speak only a few words, and unable as yet to form sentences. One boy articulates so indistinctly that he can scarcely be understood. All the others in this grade can now read and write and can count and add numbers. A class of five pupils in the First Primer who had no knowledge of letters, figures or colors one year ago, can now distinguish all of the colors, count and add figures, read words of two and three letters, write some after a copy, and can name nearly all the letters in writing.

Eleven pupils, that two years ago were unable to read and knew only a few letters, and could only speak a few words so that they could be understood, can now read quite accurately in Second Reader and spell words readily of two and three syllables. They can write legible and quite intelligent letters to their homes. At first they were listless, inattentive, and disposed to idleness, in the strictest sense, but now they have become quite active and industrious, and seem proud of their accomplishments, taking great pleasure and pride in showing how much they know.

Another class, now reading the Third Reader, when admitted could read a few words, but so poorly that a person listening to them scarcely understood what they were trying to read. Now they can read quite intelligently and seem to enjoy what they read. They have improved quite rapidly in writing and are now able to correspond quite nicely and rather intelligently—a number of them. Visitors frequently remark, with considerable surprise, regarding the neatness and perfectness of their copy-books. This class has finished addition, subtraction, and part of multiplication. Arithmetic seemingly is the most difficult for them to understand of anything we attempt to teach them. All enrolled take part in singing and gymnastic exercises. They, with one or two exceptions, knew nothing of either. At first it seemed impossible to have them speak words together, much less to sing them, and their voices being so different it is difficult to imagine the peculiar and discordant sounds they produced. But with diligent and constant training they can now sing very many songs accurately, with almost perfect time, and can learn almost any new song in four or five days. This drilling has greatly strengthened them in articulation and developed their memories, besides giving them considerable knowledge of music.

Calisthenics has been one of our best means of gaining the attention and awakening an interest in our pupils. Their imitative faculties at first seemed so undeveloped and inattentive that it was almost impossible to persuade them to even take hold of the dumb-bells and strike them three or four times together. Now they can go through quite a number of difficult exercises and keep almost perfect time to the piano. It took at least three months to teach them the most sim-

ple exercises at first, but after mastering them they could learn others much more easily and now can learn quite difficult ones in a few days' training. These exercises and dancing they all enjoy greatly, and they daily strengthen them both mentally and physically.

## GRADE B.

MISS SABRINA ARCHIBALD, TEACHER.

*Twenty-five children—sixteen boys and nine girls.*

All of them are regular attendants. All of them read, write, and count, but with different degrees of accuracy. Of three in Third Reader, in reading, writing, and spelling, their capabilities are about equal, while in arithmetic, beginning about equal, and with equal attention, one has advanced to multiplication, another to subtraction, and the other still stumbles over the simple operations of addition. So it is in all our classes, that in which one excels, another is totally deficient. All in this grade imitate very readily any movements of the hands and arms in calisthenics, and seem to enjoy them.

There are four reading in the Second Reader, and of two of them special mention must be made—little girls—sisters. One year and a-half ago they were learning one word a day, and could not form one letter in writing, while now they read in the Second Reader, copy quite a neat hand, and can compose and write short sentences. The younger one adds correctly and can subtract simple numbers, while the older adds only very simple numbers. Four are in the First Reader. The remaining members of this grade are learning words, and in this we see a very marked improvement. Some who could not learn and remember more than one word a week, can now learn one every day.

Most of these either write or print the alphabet; some of them only a few letters, while a few can, with a little assistance, arrange the letters so as to form simple words of one syllable. Three or four can write from copy their own names, while two of these can write and spell their own names.

It is impossible to give satisfactorily a statement of what these children are doing; only in very few things can we have *class* exercises, as the pupils require almost individual attention, and it is only by constant working and careful attention, that we have joyfully witnessed these slight advancements.

## GRADE C.

MISS M. MAUD ARCHIBALD, TEACHER.

Thirty pupils enrolled—three can hear, but not talk; one deaf and dumb, but learns words, writing and adding. Two can talk now, who two years ago could only say papa and mamma. The three mutes are new pupils, but show signs of improvement, and manifest great interest in what others are doing, such as gymnastic exercises, dancing,



marching, and black-board exercises. Dumb-bell movements seem to be among the best means of gaining attention and developing both mental and physical strength.

Twenty-four learn words, names of objects seen. Two boys require a week to learn one word, while they surpass others in imitation. One can write nicely any copy.

Five read in primers, four of whom, not receiving any instruction previous to coming here, can now learn to read, spell and print a word each day.

Twenty-five learn words; twenty can print; sixteen can distinguish and name colors; nine can distinguish all and name some; five can distinguish some; thirty are in calisthenics and thirty in articulation class.

### GRADE D.

*Thirty-eight enrolled—twenty-four boys and fourteen girls.*

As this department constitutes the lowest grade of our pupils, and comprises quite a large class, all that can be done for them is to amuse them and instruct them in habits of quietness and cleanliness; but we succeed even in this grade in gaining their attention so that they will regard and obey almost any order, catch and throw back to the teacher a ball or bean-sack, and seem to enjoy the pastime greatly. One year ago they were sad, utterly listless, and uncleanly in all of their habits, while now they are improving rapidly in all these particulars. Some will do nothing themselves, but enjoy watching others, and all seem contented and happy.

All know when they are spoken to. Four are learning to count; three can distinguish all colors, and five can distinguish several. Fifteen can speak quite well, while six can utter but few words. Fifteen can hear and understand, but cannot talk. Two are deaf and dumb.

In addition to our regular school discipline each day, the Matron and attendants are present at each meal to maintain order and see that the children are promptly and properly waited upon, and to render assistance to the more feeble ones, and instruct them in the use of the knife and fork.

Three evenings of each week all of our children assemble in the gymnasium for dancing and other amusement, when they spend an hour in beautiful and pleasant recreation, which they enjoy heartily, and to which they look forward each day and week with pleasure and pride.

The benefit of these pleasant hours spent in lively exercise is wonderful. By this means the awkward and indolent are made more graceful and active; the low spirited and cast down are enlivened and rendered happy, and the mental capacity of all greatly increased.

We also have Sabbath-school every Sabbath afternoon, when all of the pupils are taken into the gymnasium where they unite in singing hymns and gospel songs, and take part in devotional exercises for about half an hour. Another half hour is spent in giving class instruction in the simple Sunday-school lessons, which they all seem to enjoy, and in which they make a rapid and marked improvement.

The advancement made by all grades of our children in school work

is very marked, and we are greatly encouraged to press on in the good work with renewed patience and redoubled energies, in behalf of these heretofore, in this State, greatly neglected class of unfortunates, until we shall have accomplished the end for which this noble charity is designed, viz.: that of providing special care and training to that class of persons so deficient in intelligence that they are out of the reach of the ordinary public schools of the State, and who are left to deteriorate both mentally and physically for want of public assistance. We do not promise any great degree of proficiency in scholastic attainments, such as is acquired in the ordinary schools by ordinarily bright pupils. It is impossible to create mind where none exists, but our school does develop and strengthen a weak mind, and thereby render the condition of even the weakest better by making its possessor more comfortable and less offensive to others, while the better grades are so improved that they are enabled to read and write for their own pleasure and benefit, besides being made capable of performing all kinds of domestic duties; and the boys, in addition to the above, are taught to work on the farm and garden.

We are often asked the question, "what do you expect to make of these children and what do you aim to accomplish by training them in the various school exercises, and also, what will become of them after a certain age?" "Don't you think it is a sin to enlighten these dark minds and thus fit them for crime and possibly improve them till marriage becomes a legitimate sequence, to result in bringing others more feeble than themselves into a still darker state of existence?"

These and many similar questions are asked of me, almost daily since the opening of the institution, but invariably by parties who had never given the matter any careful thought.

Only stop and consider for a moment the danger to which feeble-minded girls are exposed in alms-houses and county poor-houses, from rude and evil-minded young men that infest almost every neighborhood, and of the number of illegitimate children born of these poor unfortunates, just because they have not the proper guidance and protection!

As to which course would be the better adapted to prevent illegitimate and feeble-minded issue, that of allowing these females to be exposed to all the dangers awaiting them in the poor-houses, or to take them and place them under well-managed discipline, where they can be taught not only the elementary work of our common schools, but how to perform all domestic duties, and be rendered not only more intelligent but more useful, respectable and happy, it seems to me requires no argument for a reasonable human person to decide. As to what we shall do with them at a certain age, and whether they will be turned loose in Mills county to annoy and pester the peaceful and law-abiding citizens of this section, I will answer, they *will not*. The object of an institution of this kind, and the school-training the pupils receive, is to enlighten the dark minds and, in time, provide for them sufficient farming-lands and work-shops so that all those who can never be made sufficiently responsible to leave the institution and safely provide for themselves, may always have a home in which, under proper and legitimate guidance, they can be measurably self-supporting, and the females be at the same time protected from those vile and degrad-

ing influences to which this class of unfortunates is peculiarly subjected.

It seems to me that the strongest argument that can be presented in favor of an institution of this kind, in an economical point of view. leaving out, if you please, the enormous amount of suffering removed, is the fact that by this means alone are prevented hundreds of issue from imbecile parentage that would fall upon the counties and states to protect and support, without check to farther increase. I claim that no one will deny that it is the duty of the states and public generally to adopt at as early a date as possible the most advisable means for the prevention of these great evils, and, in a great measure, secure the female portion of this depraved and helpless class against an immoral element that infests almost every neighborhood. If we will but take warning and profit by the experience of some of the older states, we will certainly give this important matter the due consideration which it demands of a christian and philanthropic people.

To show *something* of the evils resulting from placing female paupers of inferior intelligence in county poor-houses, I will notice a few extracts from the tenth annual report of the State Board of Charities of New York.

By a concurrent resolution of May 29, 1873, the legislature directed the State Board of Charities to examine into the cause of crime and pauperism in the state. In compliance with that resolution an examination, which occupied the secretary of the board and commissioners for the greater part of two years, was made into the antecedents of every inmate of the poor-houses of the state, and the result submitted to the legislature.

A casual perusal of this report is sufficient to convince the most skeptical that one of the most important and dangerous causes of the increase of crime and imbecility, as well as pauperism and insanity, is the unrestrained liberty allowed to vagrant and degraded young women, and the unguarded condition of female paupers of inferior mind, who, if they had during their earlier lives been placed in an institution for training, might have been rendered self-sustaining and self-protective, and thus been able to avoid, not only life-long support at the hands of the public, but the misery and untold woe brought upon their illegitimate offspring.

The following are the records of only a few of the women found in the various poor-houses—women who from early girlhood had been tossed from poor-house to jail, and from jail to poor-house, until the last trace of womanhood in them had been destroyed:

“In Albany county poor-house a single woman, forty (40) years old, of foreign birth, and nine (9) years in the United States, was the mother of seven (7) illegitimate children; the woman degraded and debased, and soon again to become a mother.”

“In Chautauqua county poor-house a woman fifty-five (55) years old, admitted when twenty-two (22) as a vagrant, \* \* \* has been discharged from the house and returned repeatedly for the past thirty-three (33) years, during which time she has had six (6) illegitimate children.”

"In Cortland county poor-house an unmarried woman, twenty-seven (27) years old, with her infant child, has been the mother of four (4) illegitimate children; and four (4) of her sisters have also had illegitimate children."

"In Essex county poor-house a black woman, widowed, aged forty-nine (49), and her daughter, single, aged twenty-four (24), and her grandson, a mulatto, four (4) years old, illegitimate, and born in the house; the first has been the mother of ten (10) children, seven (7) of whom were illegitimate, and the second has had three (3) illegitimate offspring." \* \* \*

"In Greene county poor-house a vagrant, unmarried woman, forty (40) years old, first an inmate when twenty-one (21) years old, and will probably remain a public burden for life; has five (5) illegitimate children."

"In the Herkimer county poor-house a single woman, aged sixty-four (64) years, twenty (20) of which have been spent in the poor-house; has had six (6) illegitimate children."

"In the Montgomery poor-house a woman twenty (20) years old, illegitimate, uneducated and vagrant, has two (2) illegitimate children in the house; recently married an intemperate, crippled man, formerly a pauper."

"In the Otsego county poor-house a widowed woman, aged thirty-five (35) years, three (3) times married; first when only thirteen; is ignorant, intemperate and vagrant; has spent twelve (12) years in the poor-house; has seven living children, and seems likely to burden the public with additional progeny."

These are but a few of the many specimens that show only too clearly what is the common fate of vagrant and irresponsible girls when committed to our poor-houses.

In dealing with this subject there are two distinct and separate objects to be accomplished, viz: 1st. To reform them if possible; and, 2nd, if they cannot be reformed, at least to cut off the line of hereditary pauperism, crime and imbecility, now transmitted through them.

So long as this class of women is allowed under the control of county authorities, neither of these objects can be attained, from the fact that discipline and control are necessarily spasmodic and uncertain, owing to the constant change of individual officers and the lack of proper conveniences for the positive and constant separation of the sexes. Until this gigantic evil is removed, we must expect every year to bring an increased hereditary pauperism, crime and idiocy.

A reformatory for women, under the management of women, would be a grand and noble institution, and in time would contribute more toward reducing crime, insanity, and idiocy than can well be imagined. I refer to this evil merely as one of the greatest causes of hereditary imbecility, and it should engage our most earnest attention.

When we positively know that our children of three (3) and four (4)

generations to come shall receive as their heritage the sins and virtues of their parents—all who feel and regard their responsibility will have concern for their personal habits and health, which are transmitted.

"A not unfrequent cause of mental deterioration is the intermarriage of blood relations. The great physiological law that like produces like depends upon this condition that the parents shall not be nearly allied in blood."

We do not mean to say that imbecility is always the result of causes that can be prevented, or that it is always hereditary.

Dr. Sequin says: "We have seen it creep from the couch of the young, of the healthy, and of talented, as well as from that of the lowly or the vicious." \* \* \*

Since it is evident that the rich as well as the poor, the intelligent as well as the ignorant, are liable to the sad misfortune of having members of their family deficient mentally and physically, we certainly ought not to shut our ears to the cries and pleadings of this neglected and helpless class, and withhold from them that which is due all, feeble or otherwise, in our commonwealth, the equal and free right of protection and education.

We trust that aid and sympathy in the future will not be denied the feeble-minded because of their weakness and inability to keep pace in the race, or because of their beclouded minds they have been unable to find the true way. Their very feebleness, and the fact of their existence in intellectual darkness, ought to secure to them needed help and light. Surely it is not humane or Christian to leave the wounded to suffer and die upon the field of life's battle, without kindly gathering them up and supplying their every need and want.

Other classes of inferior children, and even the strong and vigorous, have been well and liberally provided for, both in way of comforts and education, and now shall not the most neglected, as well as the most afflicted, receive some share at least of the State's bounty, which has been so long withheld from them? It is truly time we minister to the needs of these unfortunates, and withhold from them no longer justice and mercy.

They are human beings in our midst and a part of us, upon the very verge of mental death, and yet forbidden the boon which death brings. They are at present unable to supply their own reasonable demands, and we who are blest with all our faculties and reason must for a time render them the necessary aid, until they can be taught such useful arts and occupations that they will ultimately be enabled to supply their own needs. They must be governed with parental care and treated with genuine sympathy, and their every comfort and want provided by a generous and charitable public. In this I feel assured the benevolent State of Iowa will not lag behind her sister states, but come to the front, and nobly perform her duty toward the most pitiful and needful of her wards.

The opportunity now presents itself for me to express my heartfelt thanks to the officers and employes of the Institution for the zeal with which they have performed their various duties, and the interest they have manifested in the kind care and progress of our feeble children.



Miss M. Maud Archibald, who taught the first class in the Institution after its organization, and who has remained connected with the school since that time, rendering good service, has resigned her position as teacher to fill the office of superintendent of public instruction in Mills county; her resignation taking effect January 1st.

Miss Carrie Hayden, who has also been faithful and earnest in the discharge of duty, has resigned, and accepted a more pleasant and lucrative position in "a school of one."

Misses Jennie Van Dorin and Sabrina Archibald still remain with us, and continue to render their unremitting efforts to arouse and improve the feeble minds committed to their charge; and their extended experience, faithfulness and ability, cannot be too highly estimated and appreciated.

The Matron has labored patiently and faithfully in her department, rendering our children as comfortable, cheerful and happy as their limited capacities will allow.

The attendants have been all I could desire, kind, careful and watchful, and have done what they could for the comfort and improvement of their charges. They are all rewarded, not merely in the thought of having been conscientiously faithful in the discharge of their duties, but also in the gratifying reflection that their time and energies have been effectual in contributing to the improvement and comfort of this helpless and most pitiful class.

#### ACKNOWLEDGMENTS.

We cheerfully express our thanks to the publishers of the Council Bluffs Nonpareil, Malvern Leader, Sidney Advocate, Mills County Republican, Dexter Herald, Chariton Leader, Mills County Journal, and Glenwood Opinion, which papers have been gratefully received during the past year. We are under many obligations, not only to the above, but to the editors of the press generally throughout the State, for kind services rendered the institution since its establishment, in the way of calling the attention of the public to the true objects and merits of this charity.

We also gratefully acknowledge favors received from the officers of the C., B. & Q.; B. & M., in Nebraska; C., R. I. & P.; K. C., St. Jo. & C. B.; and A., T. & S. Fe railroads.

Dr. C. T. Wilbur, Superintendent Illinois Asylum for Feeble-

mind ed Children, made us very acceptable donations of blocks and apparatus for our schools.

Dr. Ranney, Hospital for Insane, Mt. Pleasant, Iowa, for donation of Stereoptican, which I highly prize as a valuable appliance for affording amusement and instruction for the children.

Drs. J. A. Donelan and W. S. Townsend, for their kind attention to the needs of the sick during my necessary absence from the Institution on several occasions.

Mrs. Dr. J. A. Donelan, for donation of a pair of beautiful canaries for little girls' play-room.

Hamer F. Wilson, Esq., school-room apparatus.

Mrs. E. I. Vansandt and Mrs. Rothert, of Keokuk, for clothing to Institution. Many thanks.

The third and fourth annual meeting of the Association of Medical Officers of American Institutions for Feeble-Minded and Idiotic persons, held its session at the New York Asylum for Idiots, June 8th to 12th, 1878, and at the Illinois Asylum for Feeble-minded children, May 27th to May 29th, 1879. Papers were read and discussed on the following subjects, viz:

"The Relation of Speech or Language to Idiocy," by Dr. H. B. Wilbur, Syracuse, N. Y.; "Temporary Loss of Speech After Epileptic Fits," Dr. Fletcher Beach, England; "Recent Progress in the Training of Idiots," Dr. E. Seguin, N. Y.; "Intemperance as a Cause of Idiocy," by Dr. G. E. Shuttleworth, England; "The Offspring of First Cousins," by Mrs. Dr. George Brown, of Barre, Mass.; "The Proportion of Sexes in Idiocy," by Dr. Isaac N. Kerlin, of Penn.; "Internal Hydrocephalus," by Dr. H. M. Knight, Connecticut; "Juvenile Insanity," by Dr. I. N. Kerlin, Media, Penn.

Reports were then received upon the development and progress of the various institutions, and improvements in school training during the years 1878 and 1879.

In conclusion, gentlemen, I desire to acknowledge kind aid and encouragement at your hands, in the way of useful suggestions and personal effort in the execution of our institution work, and for confidence you have so kindly manifested in our administration of the affairs of the Asylum during the past biennial period just closed, and trust that its future management will still continue to insure your most worthy approval, and that it will ever prove to be one of the most useful and humane of our State institutions.

I earnestly and humbly commend our helpless household to that great and wise Providence, who has so graciously blessed our past efforts in the work, and ask a continuance of His goodness to still greater prosperity and usefulness in this philanthropic enterprise in the future.

Respectfully submitted,

O. W. ARCHIBALD,  
*Superintendent.*

*Institution, Oct. 1, 1879.*

DONATIONS FOR CHRISTMAS TREE, 1877.

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DONATIONS FOR CHRISTMAS, 1878.

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SUPERINTENDENT'S REPORT

*(Of Receipts for Iowa Asylum for Feeble-Minded Children, from November 1st, 1877, to October 1st, 1879 (on account of Tuition, Clothing, and Farm Products).*

O. W. ARCHIBALD—DEBIT.

1877.

Dcc.	1.	To cash, W. R. English .....	\$ 10 00
Dec.	3.	To cash, M. France.....	60 00
Dec.	3.	To cash, G. Merritt.....	30 00

1878.

Feb.	2.	To cash, W. R. English .....	20 00
Feb.	3.	To cash, E. R. Townsend .....	20 00
Feb.	23.	To cash, G. E. Merritt .....	30 00
March	7.	To cash, M. S. Rogers.....	45 00
March	7.	To cash, C. M. Stinson.....	5 00
April	10.	To cash, W. R. English.....	10 00
April	10.	To cash, E. R. Townsend ....	20 00

Total .....\$ 250 00

CREDIT.

1877 and 1878.

Dec. 1 to April 10.	By cash, A. J. Russell (Treasurer), as per dates above .....	\$ 250 00
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DEBIT.

1878.

May	4.	To cash, M. France.....	\$ 30 00
June	14.	To cash, W. R. English .....	20 00
June	14.	To cash, G. P. Merritt .....	15 00
June	14.	To cash, Gen. Geddes.....	44 20
June	14.	To cash, S. Eull .....	13 78
June	14.	To cash, Clayton county.....	29 20
June	14.	To cash, J. B. Crombie.....	2 00
June	14.	To cash, J. S. Crim .....	3 50
June	14.	To cash, Mrs. Kinkade.....	3 50
June	14.	To cash, L. H. Morgan.....	6 75
June	14.	To cash, J. Schott.....	1 25
June	14.	To cash, Mrs. Hill .....	2 50
June	14.	To cash, Muscatine county .....	38 00
June	24.	To cash, Guthrie county.....	20 76
June	24.	To cash, Dubuque county... ..	22 25
June	24.	To cash, Benton county .....	17 05

1878.

July	5.	To cash, Greene county.....	\$ 5 45
July	5.	To cash, H. E. Jones.....	15 00
July	5.	To cash, Black Hawk county .....	26 87
July	5.	To cash, Taylor county.....	22 00
July	16.	To cash, Linn county.....	17 25
July	16.	To cash, Crawford county .....	13 17
July	16.	To cash, Scott county.....	30 48
Sept.	10.	To cash, Isaac Vandoren.....	2 85
Sept.	10.	To cash, W. R. Townsend.....	25 85
Sept.	10.	To cash, M. S. Vandusen .....	4 15
Sept.	10.	To cash, Gen. Geddes.....	30 00
Sept.	10.	To cash, from sale of three calves.....	10 00
Sept.	10.	To cash, G. B. Cadwell.....	10 00
Sept.	10.	To cash, W. H. Morris.....	5 00
Sept.	10.	To cash, H. E. Jones.....	12 25
Sept.	10.	To cash, John Schmaker .....	6 50
Sept.	10.	To cash, Mrs. Hill.....	20
Oct.	1.	To cash, H. E. Jones.....	20 00
Oct.	1.	To cash, G. B. Cadwell.....	10 00
Dec.	2.	To cash, A. B. Masterson.....	50 00
Dec.	2.	To cash, Pottawattamie county.....	19 00
Dec.	2.	To cash, G. B. Cadwell.....	10 00
Dec.	2.	To cash, Mills county.....	54 15
Dec.	2.	To cash, Jas. France .....	63 00
Dec.	2.	To cash, G. B. Cadwell....	10 00
Dec.	2.	To cash, H. W. Rary .....	10 00
Dec.	2.	To cash, H. E. Jones.....	20 00
Dec.	2.	To cash, W. R. English.....	20 00

1879.

Jan.	10.	To cash, Gen. Geddes.....	120 00
Jan.	10.	To cash, John Schmaker.....	11 20
Jan.	10.	To cash, Martha J. Hill.....	2 75
Jan.	10.	To cash, John Meighn .....	2 75
Jan.	10.	To cash, P. W. Wittich .....	2 90
Jan.	10.	To cash, G. B. Cadwell.....	10 00
Jan.	10.	To cash, Mrs. Stafford....	10 00
Jan.	10.	To cash, John Danket .....	4 75
Jan.	23.	To cash, E. P. McCreight.....	15 00
Jan.	23.	To cash, J. O. Keep.....	6 00
Jan.	23.	To cash, Mrs. Mary O'Donnell.....	10 00
Jan.	23.	To cash, Scott county.....	50 73
Jan.	23.	To cash, Mrs. E. Woodall.....	1 15
Jan.	23.	To cash, Jos. Schott... ..	5 00
Jan.	23.	To cash, S. J. Cox....	5 25
Jan.	23.	To cash, Pottawattamie county.....	45 40

1879.

Jan.	23.	To cash, Mills county.....	\$ 39 39
Jan.	23.	To cash, Floyd county.....	32 80
Jan.	23.	To cash, Guthrie county.....	11 53
Jan.	23.	To cash, Muscatine county.....	28 75
Jan.	23.	To cash, Tama county.....	5 90
Jan.	23.	To cash, Crawford county.....	11 45
Feb.	10.	To cash, O'Brien county.....	5 08
Feb.	10.	To cash, G. B. Cadwell.....	13 75
Feb.	10.	To cash, Des Moines county.....	46 13
Feb.	10.	To cash, W. R. English.....	30 00
Feb.	10.	To cash, Paul Denning.....	13 50
Feb.	10.	To cash, Bremer county.....	14 35
Feb.	10.	To cash, H. W. Rary.....	3 00
Feb.	10.	To cash, E. R. Townsend....	25 00
Feb.	10.	To cash, Black Hawk county. ....	12 16
Feb.	10.	To cash, J. B. Crombie.....	3 50
Feb.	10.	To cash, John C. Anderson.....	2 95
April	12.	To cash, Taylor county.....	18 48
April	12.	To cash, Miss Libby.....	8 00
April	12.	To cash, J. B. Cadwell.....	10 00
April	12.	To cash, Benton county.....	6 45
April	12.	To cash, S. D. Coffin.....	30 00
April	12.	To cash, Poweshiek county.....	23 00
April	12.	To cash, Rose De Vinney.....	4 45
April	12.	To cash, A. B. Masterson .....	6 00
April	12.	To cash, Fremont county.....	19 00
April	12.	To cash, F. M. McElravy.....	2 95
April	12.	To cash, L. H. Morgan.....	22 53
April	12.	To cash, G. B. Cadwell.....	10 00
April	12.	To cash, J. P. Curtis.....	18 00
April	12.	To cash, W. W. Ellis.....	30 00
April	12.	To cash, Winneshiek county.....	51 60
April	12.	To cash, cow sold (cow fund).....	29 75
May	14.	To cash, Clayton county.....	43 94
May	14.	To cash, Delaware county.....	76 06
July	11.	To cash, Dubuque county.....	15 45
July	11.	To cash, G. B. Cadwell.....	20 00
July	11.	To cash, H. B. Mitchell.....	10 00
July	11.	To cash, S. D. Coffin.....	30 00
July	11.	To cash, Simon Eull.....	18 00
July	11.	To cash, S. D. Coffin.....	10 25
July	11.	To cash, E. R. Simmons..	30 00
July	11.	To cash, G. B. Cadwell.....	13 58
July	11.	To cash, E. R. Townsend.....	60 00
July	12.	To cash, sale of hogs .....	56 77

1879.

Aug.	26.	To cash, F. Heizer.....	\$ 16 20
Aug.	26.	To cash, P. Finch.....	30 00
Aug.	26.	To cash, M. France.....	100 00
Sept.	11.	To cash, Guthrie county.....	31 00
Sept.	11.	To cash, Jefferson county.....	33 04
Sept.	11.	To cash, Floyd county.....	33 80
Sept.	11.	To cash, W. W. Ellis.....	30 00
Sept.	11.	To cash, Geo. McLaughlin.....	30 00
Sept.	11.	To cash, H. B. Mitchell.....	20 00
Sept.	11.	To cash, Scott county.....	56 78
Sept.	17.	To cash, S. J. Cox.....	3 40
Sept.	17.	To cash, W. Hollopeter.....	5 00
Sept.	17.	To cash, S. D. Coffin .....	45 00
Sept.	17.	To cash, J. Danket.....	5 35
Sept.	17.	To cash, Nannie Williams.....	2 00
Sept.	17.	To cash, C. Herman.....	5 00
Sept.	17.	To cash, Mills county.....	38 25
Sept.	17.	To cash, G. Gosslin .....	3 72
Sept.	17.	To cash, M. J. Hill.....	3 50
Sept.	17.	To cash, T. W. Wittich.....	13 90
Sept.	24.	To cash, Annie Clark.....	7 00
Sept.	27.	To cash, Dubuque county.....	17 60
Sept.	27.	To cash, H. W. Rary.....	20 00
Total.....			\$ 2619 88

## CREDIT.

1878.

May	4.	By cash paid E. R. S. Woodrow, Treasurer.....	\$ 30 00
June	14.	By cash paid E. R. S. Woodrow, Treasurer .....	179 68
June	14.	By cash paid E. R. S. Woodrow, Treasurer.....	65 51
July	5.	By cash paid E. R. S. Woodrow, Treasurer.....	63 87
July	16.	By cash paid E. R. S. Woodrow, Treasurer.....	60 90
Sept.	10.	By cash paid E. R. S. Woodrow, Treasurer.....	106 80
Oct.	1.	By cash paid E. R. S. Woodrow, Treasurer.....	30 00
Dec.	2.	By cash paid E. R. S. Woodrow, Treasurer.....	256 15

1879.

Jan.	2.	By cash paid E. R. S. Woodrow, Treasurer.....	164 40
Jan.	23.	By cash paid E. R. S. Woodrow, Treasurer.....	268 35
Feb.	10.	By cash paid E. R. S. Woodrow, Treasurer.....	169 42
April	12.	By cash paid E. R. S. Woodrow, Treasurer.....	290 21
May	14.	By cash paid E. R. S. Woodrow, Treasurer.....	120 00
July	11.	By cash paid E. R. S. Woodrow, Treasurer.....	264 05
Sept.	8.	By cash paid E. R. S. Woodrow, Treasurer.....	234 62
By balance on hand.....			315 92
Total.....			\$ 2619 88

RECAPITULATION.

Received for tuition and clothing.....	\$ 2,773 36	
Received for sale of stock.....	96 52	
Total.....	\$ 2869 88	
Paid A. J. Russell.....	\$ 250 00	
Paid E. R. S. Woodrow.....	2,303 66	
Amount on hand.....	315 92	
	<u>\$ 2869 88</u>	<u>\$ 2869 88</u>

## ITEMIZED STATEMENT

*Of quantity, kind, and cost of articles purchased for the Iowa Asylum for Feeble-minded Children from Nov. 1st, 1877, to Nov. 1st, 1879.*

ITEM.	MEASURE.	AMOUNT.	COST.
Improvements and repairs—			
Nails .....	Pounds ..	.....	\$ 56 22
Oil .....	Gallons ..	.....	6 50
Labor, repairing.....	Hours ..	.....	755 54
Screws .....	Gross ..	.....	9 00
Bolts .....	Gross ..	.....	14 00
Lumber .....	Feet.....	.....	759 07
Window glass .....	Pieces ..	.....	32 35
Hinges and butts .....	Pairs ..	.....	26 35
Stove pipes, elbows, etc .....	Joints ..	.....	38 84
Tacks and brads .....	Gross ..	.....	8 85
Pump and well repairs .....	.....	.....	181 50
Solder .....	Pound ..	.....	1 00
Hooks and staples .....	Gross ..	.....	2 87
Gas and water pipe .....	Ft. & lbs. ....	.....	91 04
Drawer pulls .....	Dozen ..	.....	1 88
Water cocks .....	Number ..	1	1 25
Plastering .....	Labor, etc ..	.....	27 85
Line chalk .....	Pound ..	.....	10
Door and padlocks ..	Number ..	.....	15 00
Sheet zinc .....	Pound ..	.....	10 35
Window sash.....	Number ..	.....	1 00
Cement .....	Barrels ..	.....	17 75
Catches.....	Number ..	18	5 30
Sheet tin .....	Number ..	3	75
Lime .....	Bushels ..	.....	20 10
Hair.....	Pound ..	.....	30
Wire stretchers for fence .....	Number ..	.....	4 25
Brick.....	M.....	9 1000	90 15
Electric bells and and attachments.....	.....	.....	40 90
Hooks for ceiling.....	Number ..	99	1 65
Tiling .....	Feet ..	126	29 40
Wall paper, etc .....	Rolls.....	.....	6 48
Shade trees.....	Labor.....	.....	3 00
Iron rods .....	Number ..	.....	50
Door rollers .....	Number ..	.....	75
Tin cornice.....	Feet ..	.....	55
Flue caps.....	Number ..	.....	1 65
Trowel .....	Number ..	1	1 50
Chalk line .....	Number ..	1	15
Spouting.....	Feet ..	66½	6 65
Staples .....	Number ..	.....	05
Door bolts.....	Number ..	8	1 75
Hat and coat hooks .....	Number ..	.....	1 55
Wire .....	Pound ..	.....	42 01
Tubing for pumps ...	Feet .....	10	1 25

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Improvements, etc.—Continued.			
- Coupling for pumps .....	Feet .....	3	\$ 1 10
- Cylinder for pumps .....	Number ..	1	6 00
Pickets .....	Number ..	12	24
Wooden spouting .....	Feet .....	84	4 32
Plaster paris .....	Pound .....		7 05
Paper hanging .....	Yard .....		44 83
Sandpaper .....	Piece .....		60
Putty .....	Pound .....		4 18
Lead (white) .....	Pound .....		3 40
Wardrobe and trunk locks .....	Number ..	30	11 00
Tack hammers .....	Number ..	8	1 40
Chimney stops and flues .....	Number ..	7	75
Ochre .....	Pounds ..	24	1 81
Rivets .....	Gross .....		75
Door knobs .....	Number ..		1 60
Japan .....	Gallon ..		60
Lampblack .....	Pound .....		10
Surveying .....	Day .....		10 25
Linseed oil .....	Gallon ..		3 65
Paint brushes .....	Number ..		2 05
Lettering and fancy painting .....			13 65
Publishing notices to builders .....	No. times. .		2 25
Coal tar .....	Gallons ..	4	75
Door springs .....	Number ..		50
Pump plunger .....	Number ..	1	25
Nuts and washers .....	Dozen. .		90
Wind-mill and attachment .....			183 54
Moving building .....	No. times. .		10 00
Lead pipe .....	Pound .....		6 56
Brass chain .....	Feet .....	12	80
Mica .....	Pieces .....		20
Door bumpers .....	Number ..	7	60
Door scrapers .....	Number ..	3	1 00
Sand .....	Loads .....	2	4 00
Sawing lumber .....	Feet .....	550	3 57
Shade trees .....	Number ..	27	4 80
Range and attachments .....	Number ..		212 75
Furniture—			
Vegetable dishes ..	Dozen .....		14 75
Zinc, for matting, stoves, etc .....	Pounds ..	390	54 08
Miscellaneous dishes .....	Dozen .....		20 45
Glass dishes .....	Dozen .....		9 91
Carpet sweeper .....	Number ..	1	2 65
Matting .....	Yards .....		35 55
Cups and saucers .....	Dozen .....		18 50
Lamp burners .....	Dozen .....		2 20
Lamps .....	Number ..	25	25 80
Pitchers .....	Number ..	53	30 60
Meat dishers .....	Dozen ..	$\frac{1}{3}$	2 70
Plates .....	Sets .....	16	9 15
Plates (soup) .....	Sets .....	29	16 28
Goblets and tumblers .....	Sets .....		11 20
Kitchen knives .....	Sets .....	10 $\frac{1}{2}$	4 30

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Furniture—Continued.			
Spoons .....	Sets.....	36	\$ 32 10
Table knives and forks.....	Sets.....		23 45
Shears .....	Number .....		6 80
Chairs .....	Dozen ...	6 $\frac{1}{2}$	104 85
Bedsteads .....	Number ..	23	81 00
Picture and motto frames.....	Number ..		33 51
Table linen.....	Yards ...	144 $\frac{1}{2}$	108 63
Milk pans.....	Number ..		13 90
Pails .....	Number ..	9	12 00
Stair rods .....	Dozen ...	1 $\frac{1}{3}$	3 98
Lamp shades.....	Dozen ...	7 $\frac{1}{2}$	4 15
Crash.....	Yards ...	463 $\frac{1}{2}$	49 93
Lantern globes .....	Number ..		2 30
Towels .....	Number ..		19 54
Hair brushes.....	Dozen ...	1 $\frac{1}{4}$	11 60
Card-ornaments.....	Number ..	22	2 11
Card-board .....	Pieces ...		3 51
Mottoes .....	Number ..	17	3 82
Door mats.....	Number ..	20	17 43
Carpet.....	Yards ...	323	228 52
Carpet (making).....	Yards ...	119	13 72
Sauce dishes.....	Sets.....	3 $\frac{1}{2}$	2 33
Mirrors.....	Number ..	6	5 85
Wash pans.....	Number ..	7	2 65
Napkins .....	Dozen ...	3 $\frac{1}{2}$	4 63
Drawers .....	Number ..	1	2 50
Chambers .....	Number ..	2	1 80
Stove-hooks and pokers.....	Number ..		45
Curtain, Holland.....	Yards ...	73	14 02
Desks .....	Number ..	1	20 00
Pepper dish.....	Dozen ...	1	95
Tidy .....	Number ..	1	1 00
Jugs .....	Number ..	5	1 05
Spittoons .....	Dozen ...	1 $\frac{1}{2}$	3 25
Umbrella .....	Number ..	1	1 50
Bung borer.....	Number ..	1	35
Post-office box.....	Number ..	1	1 25
Dippers .....	Number ..	9	2 10
Ax-handles .....	Number ..		4 90
Glass cutters.....	Number ..	2	50
Dampers. ....	Number ..	3	85
Braces for zinc.....	Number ..	4	1 00
Butcher knives.....	Number ..	4	2 35
Hand bell.....	Number ..	1	2 50
Fire shovel.....	Dozen ...	1	3 65
Dish pans.....	Number ..	16	4 25
Pliers .....	Number ..	1	65
Lanterns. ....	Number ..	10	11 55
Gimlets.....	Number ..	1	10
Candle-sticks .....	Dozen ...	1	1 10
Pie-pans.....	Dozen ...	1	1 00
Tape measures .....	Number ..	2	60
Lard cans .....	Number ..	10	7 45



## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Furniture—Continued.			
Wood saws .....	Number .	11	\$ 11 25
Shoe brushes .....	Dozen . .	1	4 30
Scissors .....	Dozen . .	1 $\frac{3}{4}$	6 30
Wash pitcher and bowls.....	Sets .....	10	14 00
Tooth and nail brushes .....	.....	.....	12 49
Statuary.....	Pieces . .	3	2 50
Hat rack .....	Number .	1	38
Rugs .....	Number .	1	4 95
Tea pots.....	Number .	6	4 30
Window shades .....	Dozen . .	.....	39 29
Secretary .....	Number .	1	5 50
Looking-glass .....	Number .	2	2 80
Clock shelf .....	Number .	1	1 50
Bed castors.....	Sets.....	19	4 00
Tin cups .....	Number .	.....	11 65
Sash tool .....	Number .	1	35
Compass saws.....	Number .	2	50
Smoothing planes.....	Number .	1	55
Oil stove .....	Number .	1	35
Bird-cage hooks .....	Number .	1	20
Trellises.....	Number .	6	70
Cushions .....	Number .	3	6 00
Stencils .....	Set .....	1	50
Key ring .....	Number .	7	45
Kettles .....	Number .	4	4 15
Screw pulleys.....	Number .	.....	05
Dish pans .....	Number .	6	10 50
Mop sticks .....	Number .	20	5 30
Bed springs .....	Set .....	1	4 00
Graters.....	Number .	4	55
Mugs.....	Dozen . .	13 $\frac{1}{4}$	21 40
Saws .....	Number .	1	2 25
Wire cloth .....	Feet .....	34	1 70
Screw drivers .....	Number .	4	1 15
Strainers .....	Number .	2	90
Jars .....	Number .	16	3 05
Hammocks.....	Number .	1	3 00
Churns .....	Number .	1	1 00
Soup ladles .....	Number .	5	1 00
Flower pots .....	Number .	.....	16 45
Ice tools.....	Set .....	1	80
Jelly tins.....	Dozen . .	.....	70
Book rack .....	Number .	2	3 00
Tubs .....	Dozen . .	1 $\frac{1}{2}$	4 25
Platters .....	Number .	5	3 20
Stove shaker .....	Number .	1	50
Faucets .....	Number .	2	1 50
Coal hods .....	Number .	2	1 25
Bird cages.....	Number .	2	5 00
Clocks.....	Number .	4	13 50
Stools (dining-room) .....	Number .	112	56 00
Wash stands .....	Number .	3	10 50
Rice boilers .....	Number .	1	1 00

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Furniture—Continued.			
Apple parer .....	Number .	1	\$ 75
Soap holders.....	Dozen ...	1 $\frac{1}{4}$	1 70
Dripping pans.....	Number .	2	1 70
Bath tub .....	Number .	1	8 50
Chromos .....	Number .	3	4 50
Miscellaneous carpenter tools.....	Number .	.....	3 35
Chimney cleaner.....	Number .	1	10
Cold chisel .....	Number .	1	50
Stoves .....	Number .	6	60 25
Brackets .....	Number .	19	4 85
Reservoirs .....	Number .	1	11 00
Tin flanges for commodes.....	Number .	2	30
Door keys.....	Dozen ...	$\frac{3}{4}$	1 20
Wardrobes .....	Number .	1	18 00
Tables.....	Number .	10	28 25
Egg beaters .....	Number .	3	1 60
Coffee pots .....	Number .	4	2 10
Cake turners .....	Number .	1	20
Can openers.....	Number .	3	55
Thumb-screws.....	Number .	2	55
Chandeliers .....	Number .	2	10 00
Iron rods for lamps.....	Number .	2	50
Butter dishes.....	Dozen ...	1 $\frac{1}{2}$	3 50
Sash cord.....	Yards ...	1 $\frac{1}{2}$	1 40
Household expenses—			
Matches .....	Gross box	1 $\frac{20}{100}$	16 03
Lamp chimneys .....	Dozen ...	39 $\frac{1}{4}$	43 35
Toilet soap.....	Dozen ...	25 $\frac{2}{3}$	21 58
Shoe blacking .....	Dozen ...	.....	9 85
Brooms .....	Dozen ...	27 $\frac{1}{2}$	75 07
Beeswax .....	Pounds .	.....	40
Window springs.....	Number .	.....	1 27
Repairs on household goods.....	Number .	.....	53 38
Lamp wicks.....	Dozen ...	.....	2 50
Combs (ridding) .....	Dozen ...	.....	38 79
Oil cloth .....	Yards ...	.....	20 20
Vases .....	Number .	1	65
Egg cases.....	Number .	2	1 50
Knitting cotton.....	Balls ....	1	10
Scrub brushes.....	Dozen ...	.....	20 55
Buckets .....	Dozen ...	8 $\frac{1}{3}$	46 70
Pins.....	Doz. pap's	.....	10 75
Stove polish .....	Doz. pap's	5 $\frac{1}{2}$	4 75
Bed-slats .....	Dozen ...	.....	8 00
Combs (fine).....	Dozen ...	.....	6 47
Twine.....	Pound ...	.....	1 20
Sharpening shears.....	Times ...	7	90
Spring curtains.....	Dozen ...	7 $\frac{1}{2}$	36 85
Picture cord.....	Yards ...	.....	7 40
Disinfectant.....	Bottles ..	.....	5 95
Tooth powder and wash.....	.....	.....	2 75
Clothes brushes .....	Dozen ...	$\frac{1}{2}$	4 75
Whitewash brushes.....	Dozen ...	$\frac{1}{2}$	5 90

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Household expenses—Continued			
Zephyr .....	Pounds ..	7 $\frac{1}{2}$	\$ 14 30
Bath sprinkler.....	Number ..	1	30
Razors and strops.....	Number ..	.....	5 00
Dust brushes .....	Number ..	1	65
Round combs.....	Dozen ...	$\frac{1}{2}$	60
Upholstering .....	No. times	1	1 00
Scouring bricks.....	Number ..	30	3 30
Baskets .....	Number ..	14	9 20
Kindling .....	Load ....	1	50
Whisk brooms.....	Number ..	1	20
Feather dusters.....	Dozen ...	1 $\frac{1}{2}$	20 20
Lamp globes.....	Number ..	1	50
Molasses gates .....	Number ..	2	1 75
Fruit cans.....	Dozen ...	$\frac{1}{2}$	20
Repairs on sewing machine .....	Times ..	.....	1 00
Combs.....	Dozen ...	1	1 25
Machine oil.....	Bottles.....	.....	3 45
Patterns.....	Number ..	3	90
Spanish whiting.....	Pounds ..	58	3 86
Repairing lanterns.....	Times ..	.....	30
Sprinklers .....	Number ..	2	2 10
Covering crutches .....	Number ..	1	75
Soldering iron .....	Number ..	1	45
Indelible .....	Dozen ...	2 $\frac{1}{2}$	9 80
Bird seed.....	Pounds ..	.....	3 30
Miscellaneous papers .....	Number ..	.....	2 65
Hair pins.....	Gross .....	.....	1 35
Musquito bars.....	Number ..	.....	2 90
Rent on sewing machine.....	Months ..	5	2 00
Charcoal.....	Bushels..	$\frac{1}{2}$	20
Float .....	Number ..	1	1 00
Darning needles .....	Papers.....	.....	40
Hemp packing.....	Pounds ..	5 $\frac{1}{3}$	80
Red peppers .....	Number ..	.....	30
Cutting wood.....	Cords .....	.....	60
Jewelry .....	Pieces .....	.....	2 50
Shaving mugs .....	Number ..	1	25
Darners .....	Number ..	2	20
Dusters.....	Number ..	1	1 25
Miscellaneous books .....	Number ..	6	5 75
Bedding—			
Cotton batting.....	Pounds ..	89	13 23
Blankets.....	Pairs ....	29	75 30
Making bedding .....	.....	.....	19 30
Ticking.....	Yards ..	.....	137 11
Pillows .....	Number ..	.....	8 00
Quilts .....	Number ..	30	36 66
Feathers .....	Pounds ..	55 $\frac{1}{2}$	33 75
Muslin .....	Yards ..	.....	153 18
Comforts .....	Pairs ...	60	135 00
Food—			
Meal .....	Pounds ..	7115	106 45
Chickens (live).....	Dozens ..	31	56 76

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Food—Continued.			
Salmon (canned) .....	Dozens ..	13 $\frac{1}{3}$	\$ 40 46
Oat meal .....	Barrels ..	25 $\frac{1}{4}$	129 29
Oysters (canned).....	Doz. cans.	7 $\frac{1}{4}$	38 35
Crackers .....	Pounds ..	.....	39 18
Beef steak.....	Pounds ..	1846 $\frac{1}{2}$	180 46
Beef (boil).....	Pounds ..	6105	331 65
Beef (roast).....	Pounds ..	696 $\frac{1}{2}$	66 00
Mutton.....	Pounds ..	139 $\frac{1}{2}$	16 72
Sausage .....	Pounds ..	46 $\frac{1}{2}$	3 40
Fish (fresh) .....	Pounds ..	313 $\frac{3}{4}$	40 60
Flour .....	Pounds ..	11560	379 75
Rice.....	Pounds ..	3746	362 54
Corn starch .....	Pounds ..	82	2 70
Bread .....	Loaves....	39530	2381 70
Pork .....	Pounds ..	.....	12 51
Cakes .....	Dozen .....	.....	13 30
Salt fish .....	Pounds ..	.....	25 65
Veal .....	Pounds ..	.....	11 38
Rolls and rusks.....	Dozen.....	.....	8 32
Jelly rolls .....	Dozen .....	.....	5 40
Dried beef.....	Pounds ..	.....	68 05
Chicken (dressed).....	Pounds ..	.....	41 76
Buckwheat flour.....	Barrels ..	2	16 75
Turkeys .....	Pounds ..	308 $\frac{1}{3}$	33 17
Graham flour.....	Pounds ..	.....	46 94
Salt .....	Barrels ..	12	25 25
Gingerbread .....	Cards ....	10	95
Milk .....	Quarts ...	15	1 05
Hams .....	Pounds ..	265 $\frac{3}{4}$	23 95
Dried corn .....	Pounds ..	.....	2 10
Soup bones.....	Number ..	.....	1 30
Corned beef .....	Doz. cans.	2 $\frac{1}{2}$	9 85
Succotash .....	Doz. cans.	$\frac{1}{2}$	20
Beef hearts, livers, and tongues.....	Number ..	.....	80
Baked beans.....	Dozen ...	2 $\frac{1}{2}$	6 70
Pie plant.....	Dozen .....	.....	10 10
Ginger snaps .....	Pounds ..	.....	65
Cream.....	Quarts ...	8	20
Codfish .....	Pounds ..	.....	2 90
Provisions—			
Butter .....	Pounds ..	8593 $\frac{1}{3}$	1758 24
Eggs .....	Dozen ...	7197 $\frac{1}{3}$	698 96
Sugar .....	Pounds ..	7957 $\frac{1}{3}$	801 80
Lard .....	Pounds ..	626 $\frac{1}{2}$	97 41
Molasses .....	Gallon ...	292	148 25
Tea .....	Pounds ..	513	255 45
Coffee .....	Pounds ..	1109 $\frac{1}{2}$	225 01
Vinegar .....	Gallon ...	218 $\frac{1}{2}$	63 63
Corn starch.....	Pounds ..	.....	5 25
Cheese .....	Pounds ..	.....	90 35
Pepper .....	Pounds ..	.....	24 96
Nutmeg .....	Dozen .....	.....	6 05
Candy (Christmas tree) ... ..	Pounds ..	88 $\frac{1}{4}$	22 70

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Provisions—Continued.			
Nuts .....	Pounds ..	.....	\$ 3 65
Ginger .....	Pounds ..	9	4 05
Hominy .....	Pounds ..	.....	75 52
Table sauce .....	Bottle ....	1	50
Cinnamon .....	Pounds ..	.....	2 28
Mustard .....	Pounds ..	.....	5 20
Flavoring, etc. ....	Doz. bot. ....	.....	6 90
Catsup .....	Bottles ...	2	35
Honey .....	Pounds ..	76 $\frac{3}{4}$	17 77
Cloves .....	Pounds ..	.....	1 27
Dates .....	Pounds ..	7 $\frac{1}{2}$	75
Cocoa .....	Pounds ..	52	25 55
Ice-cream .....	Gallons ..	.....	6 27
Buckwheat .....	Bushel ...	$\frac{1}{4}$	40
Cream salad .....	Bottles ...	2	1 00
Allspice .....	Pounds ..	1 $\frac{1}{2}$	80
Sage .....	Pounds ..	$\frac{1}{4}$	15
Pop corn .....	Pounds ..	2	30
Apple butter. ....	Cans. ....	.....	75
Chow chow .....	Gallon ....	.....	7 35
Baking powder .....	Pounds ..	261	109 60
Yeast .....	Pounds ..	.....	5 70
Cream tartar .....	Pounds ..	$\frac{1}{2}$	10
Vegetables—			
Sweet potatoes .....	Pounds ..	2146	113 10
Irish potatoes .....	Bushels ..	763	356 78
Tomatoes (canned) ..	Doz. cans. ....	43 $\frac{1}{4}$	85 16
Onions .....	Bushels ..	.....	51 45
Pickles .....	Gallons ..	.....	56 80
Corn (canned) .....	Doz. cans. ....	.....	51 22
Beans .....	Bushels ..	.....	154 13
Pumpkin (canned) ..	Doz. cans. ....	.....	14 65
Cabbage .....	Doz. he'ds ..	79 $\frac{1}{2}$	54 18
Turnips .....	Bushels ..	.....	84 64
Celery .....	Bunches ..	.....	12 00
Parsnips .....	Bushels ..	.....	9 37
Asparagus .....	Doz. bun. ....	.....	4 79
Lettuce .....	Doz. bun. ....	.....	16 36
Cauliflower .....	Doz. bun. ....	.....	3 05
Squash .....	Number ..	.....	7 75
Cucumber .....	Dozen ....	.....	1 95
Sweet corn .....	Dozen ....	.....	6 90
Tomatoes (nat.) .....	Bushels ..	.....	14 15
Spinach .....	Pound ...	3	15
Sauer Kraut .....	Barrels ..	11	80 00
Peas (canned) .....	Doz. cans. ....	1 $\frac{1}{2}$	3 50
Horseradish .....	Bottles ...	5	1 20
Radishes .....	Dozen ....	.....	7 75
Beets .....	Bushels ..	.....	11 76
Carrots .....	Bushels ..	10	3 00
Fruit—			
Peaches (canned) .....	Doz. cans. ....	31 $\frac{1}{2}$	93 53
Peaches (dried) .....	Pounds ..	.....	8 52

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
<b>Fruit—Continued.</b>			
Lemons .....	Dozen ...	99	\$ 47 59
Raisins .....	Pounds ..	26	4 56
Cranberries.....	Gallons ..	51½	24 50
Prunes .....	Pounds ..		17 63
Plums (canned).....	Doz. cans.	7½	22 06
Apples .....	Bushels..		251 85
Blackberries (canned).....	Doz. cans.		44 15
Blackberries (dried).....	Pounds ..		3 00
Blackberries (natural) .....	Quarts ...		3 05
Strawberries (natural).....	Quarts ...		39 61
Strawberries (canned) .....	Doz. cans.	5¾	12 36
Oranges .....	Dozens ...		19 37
Apples (dried) .....	Pounds ..	54	6 45
Raspberries (natural).....	Quarts ...		11 79
Raspberries (canned) .....	Doz. cans.	3¾	8 80
Raspberries (dried) .....	Pounds ..	18½	7 82
Jelly .....	Glasses ..		9 80
Currants (Eng. dried).....	Pounds ..	11	1 20
Huckleberries .....	Quarts ...		60
Cherries (canned).....	Doz. cans.	½	1 20
Cherries (natural) .....	Quarts ...		1 85
Currants (natural).....	Quarts ...		15 16
Peas.....	Quarts ...		26 39
Crab apples.....	Bushels..	2¾	2 10
Melons .....	Number ..		2 50
Pumpkin (canned).....	Cans.....		15
Quince (canned) .....	Cans .....		92
Peaches (natural).....	Bushels..		4 40
Peach and apple butter .....	Cans .....		2 75
Apricots .....	Cans .....		1 15
Gooseberries.....	Quarts ...		20
Grapes (natural).....	Pounds ..	1288	55 70
Grapes (canned).....	Doz. cans.	1	3 90
Pears (canned).....	Doz. cans.	14¾	63 44
<b>Farm and garden—</b>			
Hoes .....	Number ..	6	2 75
Forks .....	Number ..	1	85
Fork handles.....	Number ..	1	20
Farmers' boiler.....	Number ..	1	25 00
Plow .....	Number ..	1	15 00
Rent on pasture .....	Acres....		19 50
Anti-rattles .....	Number ..	2	45
Step-ladder .....	Number ..	1	3 00
Oil cans .....	Number ..	2	45
Corn knives .....	Number ..	2	1 00
Fly nets.....	Number ..	1	1 50
Scythe sharpening.....	No. times	2	35
Buying corn.....	Bushels ..	385	3 85
Grass hooks .....	Number ..	1	75
Condition-powders .....	Packages.	5	2 50
Lap robes and duster .....	Number ..	5	6 75
Jack and trace chains.....	Number ..		4 25
Horse brushes.....	Number ..	2	1 90

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
<b>Farm and garden—Continued.</b>			
Buggy whips.....	Number ..	16	\$ 12 50
Horse covers.....	Number ..	1	1 70
Rakes ..	Number ..		2 95
Oil cake.....	Pound ..		25
Garden seed.....	Papers ..		6 15
Auger bits.....	Dozen ..	$\frac{1}{3}$	1 65
Shovels and spades.....	Dozen ..	1	15 45
Horse blankets.....	Number ..		9 70
Barrels ..	Number ..	4	1 60
Wrenches ..	Number ..	7	3 80
Shoeing horses.....	No. times ..		85 20
Repairing wagons, farm utensels, etc.....	No. times ..		246 75
Double-trees and clevises.....	Number ..		10 15
Sacks ..	Number ..		3 65
Rope ..	Pounds ..		7 33
Repairing harness ..	No. times ..		12 60
Scythes and brush-hooks.....	Number ..		11 25
Harness and parts.....	Number ..		54 20
Grindstones ..	Number ..	2	2 25
Saw-dust ..	Loads ..	5	8 00
Rent on rollers.....	Times ..		2 00
Neck-yoke ..	Number ..		1 75
Axle-grease.....	Boxes ..	2	50
Water and slop buckets.....	Number ..		8 00
Wheel-barrows ..	Number ..	7	21 75
Halter chains.....	Number ..	2	85
Curry combs.....	Number ..	7	1 50
Saw bucks.....	Number ..	6	5 50
Wagon ..	Number ..	1	80 00
Bob sleds.....	Set.....	1	17 50
Saw frames.....	Number ..		2 50
<b>Laundry supplies—</b>			
Starch ..	Pounds ..	260	29 71
Lye.....	Boxes.....		57 73
Blueing ..	Boxes.....		11 52
Soap.....	Pounds ..		128 71
Repairs of laundry apparatus.....	No times.....		13 03
Soap grease.....	Pounds ..	868	33 75
Iron stands.....	Number ..		10
Clothes pins.....	Dozen ..	74	4 54
Making soap ..	Barrels ..	21	38 00
Wash boards.....	Dozen ..	$\frac{2}{3}$	2 60
Washing machines.....	Number ..	3	98 50
Clothes lines.....	Feet ..		3 88
Potash ..	Boxes.....		26 09
Clothes wringers.....	Number ..	3	33 00
Sad irons.....	Dozen ..		42
Indigo ..	Pound ..		2 60
Fluting irons.....	Number ..		3 00
Bosom board ..	Number ..	1	1 50
Clothes basket.....	Number ..	3	2 55
<b>Stock feed and bedding—</b>			
Corn ..	Bushels. .	1405	296 41

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
<b>Stock Feed and Bedding—Continued.</b>			
Bran .....	Pounds ..	2997 1/4	\$ 150 25
Oats .....	Bushels ..		275 39
Hay .....	Tons .....	36 1/8	188 25
Chop feed .....	Pounds ..		16 60
Straw .....	Loads ..		34 00
<b>Live Stock—</b>			
Cows .....	Number ..	9	258 00
Hogs and pigs .....	Number ..	13	55 00
<b>Clothing—</b>			
Gingham .....	Yards ...	1035 3/4	118 14
Thread .....	Doz. spo'ls	108	74 20
Prints .....	Yards ...	107 1/2	90 91
Chambray .....	Yards ...	1	25
Muslin for clothing .....	Yards ...		63 02
Buttons .....	Dozen ..		59 69
Hose (full) .....	Doz. pairs		83 50
Dress goods .....	Yards ..		26 53
Flannel (wool) .....	Yards ...		67 61
Fans .....	Number ..		25
Mending shoes and boots .....	Times ...		77 20
Cotton flannel .....	Yards ...	187	28 10
Overalls .....	Pairs ...		20 85
Over-waists and jackets .....	Number ..		5 65
Shoes .....	Pairs ...		342 95
Hats (boys) .....	Number ..	87	64 55
Boots .....	Pairs ...	103	270 75
Hose (half) .....	Doz. pairs		31 38
Pants .....	Pairs ...	39	70 55
Coats .....	Number ..	28	85 80
Vests (under) .....	Dozen ...	1 1/2	3 45
Suits .....	Number ..	25	191 25
Shirts .....	Dozen ...	5 3/4	45 35
Shirts (under) .....	Dozen ...	1 1/2	1 95
Drawers .....	Dozen ...	11	6 95
Slippers .....	Pairs ...	15	16 75
Elastic .....	Yards ...		8 41
Braid .....	Bunches ..	16	1 50
Making clothing .....	Articles ..		22 60
Shirting .....	Yards ...	412	59 20
Mittens .....	Pairs ...	33	13 90
Handkerchiefs .....	Dozen ...	6 1/2	8 26
Suspenders .....	Dozen ...		25 25
Paper collars .....	Doz. box's		5 55
Hand needles .....	Pairs ...		13 25
Machine needles .....	Dozen ...		5 55
Shoe laces .....	Gross ...		8 65
Denim .....	Yards ...		1 70
Duck .....	Yards ...		1 60
Cassimere .....	Yards ...	20 1/2	15 12
Cottonade .....	Yards ...	77 1/2	17 02
Nankeen .....	Yards ...		4 00
Ribbon .....	Yards ...	92	7 51
Poplin .....	Yards ...	15	2 25



## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Clothing—Continued.			
Drilling .....	Yards ...	81	\$ 9 17
Jeans .....	Yards ...	374	136 72
Tailoring and sewing.....	Pieces .....		64 55
Straw hats (boys) .....	Number .....		31 45
Edging and embroidering.....	Yards .....		4 35
Pique .....	Yards ...	51½	55
Hats (girls) .....	Number .....	7	14 10
Gloves .....	Pairs .....	11	5 40
Caps (boys) .....	Number .....	35	21 80
Shawls .....	Number .....	2	1 40
Overcoats .....	Number .....	1	9 00
Underwear .....	Suits .....	3	2 90
Vests (for boys) .....	Number .....	14	13 15
Skirts .....	Number .....	2	2 50
Lace .....	Yards ...	2¾	70
Shoe-soles .....	Number .....		35
Bonnets .....	Number .....	16	4 00
Shoe-buttons .....	Dozen .....		1 25
Neck-ties (girls) .....	Dozen ...	1	7 20
Alpaca .....	Yards ...		2 10
Whalebone .....	Number .....	1	10
Water-proof .....	Yards ...	24	18 65
Safety pins.....	Gross .....		6 10
Neck-ties (boys) .....	Dozen ...	¼	95
Diaper .....	Yards ...	141½	28 30
Coat-binding .....	Bunches .....		2 00
Cambric .....	Yards ...		2 35
Ruching.....	Yards ...		30
Shawl pins.....	Gross .....	1¼	1 50
Nubias .....	Number .....	2	1 30
Pants buckles.....	Gross .....		40
Fringes .....	Yards ...	8½	45
Fuel—			
Wood .....	Cords ....	416	1316 00
Stone coal.....	Bushels..	340	62 25
Lights—			
Coal oil.....	Gallons .....		175 51
Candles .....	Dozens .....		35 70
Lard oil.....	Gallons .....	1	1 35
Freight, etc.—			
Freight .....			101 01
Express .....			70 99
Salaries .....	Months ..	524½	11331 91
School-room supplies—			
Dumb-bells.....	Set .....	1	35
Thimbles.....	Number .....		1 10
Germantown yarn.....	Pounds .....		8 27
Ink.....	Quarts.....		9 05
Pen-holders .....	Dozen .....		5 00
School books.....	Dozen .....		33 60
Music books, etc.....	Dozen .....		4 85
Rent on piano.....	Months ..	6	20 25
Call bells.....	Number ..	5	6 75

## ITEMIZED STATEMENT.

ITEM.	MEASURE.	AMOUNT.	COST.
School-room supplies—Continued.			
Drawing paper.....	Sheets .....	2.8	40
Wood strips for fancy work.....	Number .....		45
Beads.....	Dozen .....		7 16
Geographies.....	Number .....	4	4 00
Slates.....	Dozen .....	3 $\frac{1}{2}$	4 65
Crayons.....	Gross .....	21	5 80
Black board erasers.....	Dozen .....	2 $\frac{1}{2}$	3 56
Numerical frames.....	Number .....	3	3 75
Cards.....	Number .....		1 20
Cribbage board.....	Number .....	1	50
Checker board.....	Number .....		3 10
Slate pencils.....	Gross .....		1 30
Copy books.....	Dozen .....	2 $\frac{1}{2}$	2 40
Readers.....	Dozen .....	4 $\frac{1}{2}$	18 15
Miscellaneous school books.....	Dozen .....	$\frac{1}{4}$	2 25
Amusements—			
Kaleidoscopes.....	Dozen .....	$\frac{1}{2}$	50
Canaries.....	Dozen .....	1 $\frac{1}{2}$	12 00
Fire crackers.....	Bunches.....		1 00
Croquet tables.....	Number .....	2	15 00
Croquet sets.....	Number .....	1	5 00
Toy tables.....	Number .....	2	2 00
Toys.....	Number .....		6 65
Rubber balls.....	Number .....		90
Croquet (tables).....	Set.....	$\frac{1}{2}$	75
Toy book.....	Number .....	1	1 00
Use of sleds for children.....	Times.....		5 50
Boards for children.....	Number .....		2 00
Marbles.....	Dozen .....	7	70
Fishing poles.....	Number .....	1	15
Archery.....	Sets .....		16 10
Office supplies—			
Mucilage.....	Bottles... ..	1	20
Warrant blanks.....	Book.....	2	27 00
Envelops, and printing same.....	Number .....		20 05
Writing paper.....	Quires.....		16 92
Pencils.....	Gross .....		3 65
Blank books.....	Number .....		26 70
Binding office supplies.....			2 00
Elastic bands.....			4 25
Letter heads, etc.....	Number .....		22 00
Circulars.....	Number .....		2 00
Pens.....	Gross .....		10 90
Copies proceedings of medical officers, etc.....	Number .....		23 75
Rulers.....	Number .....	2	1 25
Printed slips for inside reports.....	Number .....	500	2 50
Waste baskets.....	Number .....	1	1 00
Postal cards.....	Number .....	2000	20 00
Erasers.....	Number .....		2 35
Rubber stamps.....	Number .....		3 25
Ink stands.....	Number .....		2 45
Vouchers.....	Number .....		9 00
Paper wrappers.....	Number .....		2 50

## ITEMIZED STATEMENT—CONTINUED.

ITEM.	MEASURE.	AMOUNT.	COST.
Office supplies—Continued.			
Postage—Stamps .....	Number .....		\$ 136 32
Box rent.....			3 60
Contracts—			
Building gymnasium .....			2918 00
Building barn .....			349 25
Building laundry.....			710 00
Steam engine(Too small, and applied on windmill payment) .	Number .....	1	1 25
Piano .....	Number .....	1	493 94
Medical and surgical supplies—			
Paints, drugs, varnishes, etc. ....			871 96
Sponges .....			4 00
Syringes.....			50
Corks.....			70
Spectacles .....	Pair .....	3	3 90
Miscellaneous instruments.....			17 45
Deficiency (back accounts paid) ....			1144 60
Miscellaneous expenses—			
Drayage .....			31 55
Filing and setting saws.....			24 90
Exchange on drafts.....			4 78
Discount on orders .....			220 86
Expense, hunting children.....			34 70
Weighing.....			2 70
Tuning piano.....	Times .....	4	14 66
Interest on overdrafts .....			33 07
Subscription on papers.....			6 15
Advertising .....			10 25
Green-house plants .....			7 25
Grass seed.....			4 57
Legal service .....			3 00
Livery and horse hire.....	Hauling .....		53 95
Traveling expenses.....			7 95
Money advanced to pupils .....			7 00
Hauling water.....			20 10
Boxes .....	Number .....	6	3 15
Well-buckets .....	Number .....	2	1 10
Crutches .....	Pair .....	1	1 00
Grinding knives.....	Times .....	1	15
Rendering lard ...	Pounds .....	545	5 45
Killing and cutting up hogs.....			12 50
Extracting teeth.....			50
Boxes and drayage (wholesale houses).....			1 75
Printing.....			8 50
Salary of Treasurer.....			50 00
Magazines .....			1 25
House plants .....			4 85
Traps .....	Number .....	11	3 10
Check books.....	Number .....	7	13 00
Telegrams .....	Number .....		10 25
Aiding Board of Trustees (to Dr. Wilbur).....			20 00
Signing reports.....			4 00
Cutting and hauling ice.....			10 00
Stock from pound .....			1 00
Ice .....	Pounds .....	830	8 55

# TREASURER'S REPORT.

A. J. RUSSELL, *Treasurer of Asylum for Feeble-Minded Children,  
Glenwood, Iowa.*

DATE.	SUPPORT FUND—DR.	AMOUNT.
1877.		
Dec. 3	To State order.....	\$ 826 00
Dec. 3	To cash, O. W. Archibald.....	100 00
1878.		
Jan. 3	To State order .....	845 00
Feb. 2	To State order .....	845 00
Feb. 23	To cash, O. W. Archibald .....	70 00
March 7	To State order .....	895 00
March 7	To cash, O. W. Archibald .....	50 00
April 10	To State order .....	920 00
April 10	To cash, O. W. Archibald .....	30 00
	Amount received since last report.....	\$ 4581 00

## CREDIT.

Superintendent's order, number 587 .....	\$ 5 20
Superintendent's order, number 429 .....	12 00
Superintendent's order, number 439 .....	10 00
Superintendent's order, number 417 .....	3 12
Superintendent's order, number 418 .....	7 30
Superintendent's order, number 443 .....	8 25
Superintendent's order, number 440 .....	1 05
Superintendent's order, number 444 .....	66 80
Superintendent's order, number 445 .....	19 95
Superintendent's order, number 423 .....	12 00
Superintendent's order, number 447 .....	50 83
Superintendent's order, number 425 .....	83 33
Superintendent's order, number 461 .....	31 06
Superintendent's order, number 464 .....	313 70
Superintendent's order, number 467 .....	3 15
Superintendent's order, number 470 .....	2 00
Superintendent's order, number 473 .....	10 00
Superintendent's order, number 475 .....	20 00
Superintendent's order, number 478 .....	12 00
Superintendent's order, number 484 .....	12 00
Superintendent's order, number 486 .....	25 00
Superintendent's order, number 495 .....	3 00

Superintendent's order, number 496 .....	\$ 1 00
Superintendent's order, number 497 .....	4 25
Superintendent's order, number 500 .....	11 86
Superintendent's order, number 505 .....	19 35
Superintendent's order, number 507 .....	421 99
Superintendent's order, number 511 .....	27 25
Superintendent's order, number 515 .....	70 00
Superintendent's order, number 516 .....	6 85
Superintendent's order, number 517 .....	40 71
Superintendent's order, number 518 .....	6 86
Superintendent's order, number 521 .....	4 00
Superintendent's order, number 524 .....	14 00
Superintendent's order, number 525 .....	3 50
Superintendent's order, number 527 .....	15 00
Superintendent's order, number 538 .....	12 00
Superintendent's order, number 540 .....	83 33
Superintendent's order, number 549 .....	20 00
Superintendent's order, number 555 .....	9 60
Superintendent's order, number 560 .....	4 80
Superintendent's order, number 562 .....	326 48
Superintendent's order, number 568 .....	8 25
Superintendent's order, number 584 .....	5 00
Superintendent's order, number 586 .....	105 00
Superintendent's order, number 590 .....	9 00
Superintendent's order, number 593 .....	4 09
Superintendent's order, number 591 .....	12 00
Superintendent's order, number 596 .....	15 00
Superintendent's order, number 597 .....	12 00
Superintendent's order, number 598 .....	25 00
Superintendent's order, number 599 .....	83 33
Superintendent's order, number 602 .....	12 00
Superintendent's order, number 604 .....	25 00
Superintendent's order, number 607 .....	12 00
Superintendent's order, number 610 .....	14 50
Superintendent's order, number 612 .....	21 88
Superintendent's order, number 613 .....	39 32
Superintendent's order, number 615 .....	79 91
Superintendent's order, number 622 .....	22 12
Superintendent's order, number 625 .....	209 48
Superintendent's order, number 627 .....	6 50
Superintendent's order, number 631 .....	6 55
Superintendent's order, number 633 .....	37 35
Superintendent's order, number 634 .....	3 50
Superintendent's order, number 644 .....	25 00
Superintendent's order, number 645 .....	83 33
Superintendent's order, number 647 .....	18 00
Superintendent's order, number 651 .....	12 00
Superintendent's order, number 654 .....	12 00
Superintendent's order, number 665 .....	8 00
Superintendent's order, number 668 .....	101 45
Superintendent's order, number 675 .....	5 95
Superintendent's order, number 676 .....	203 88
Superintendent's order, number 681 .....	285 78
Superintendent's order, number 682 .....	105 00
Superintendent's order, number 683 .....	70
Superintendent's order, number 685 .....	6 75
Discount on State order .....	2 30
Interest on orders .....	1 42
<b>Total .....</b>	<b>\$ 3454 54</b>

## SALARY FUND.

## DEBIT.

To overdraft from Support Fund .....\$ 395 37

## CREDIT.

Superintendent's order, number 430 .....	\$ 3 15
Superintendent's order, number 431 .....	25 00
Superintendent's order, number 437 .....	12 00
Superintendent's order, number 474 .....	10 00
Superintendent's order, number 482 .....	15 00
Superintendent's order, number 491 .....	12 00
Superintendent's order, number 535 .....	20 00
Superintendent's order, number 536 .....	10 00
Superintendent's order, number 537 .....	30 00
Superintendent's order, number 544 .....	12 00
Superintendent's order, number 547 .....	20 00
Superintendent's order, number 588 .....	20 00
Superintendent's order, number 594 .....	12 00
Superintendent's order, number 595 .....	30 00
Superintendent's order, number 600 .....	30 00
Superintendent's order, number 601 .....	30 50
Superintendent's order, number 605 .....	12 00
Superintendent's order, number 608 .....	12 00
Superintendent's order, number 639 .....	20 00
Superintendent's order, number 643 .....	30 00
Superintendent's order, number 670 .....	30 00
Interest on order.....	12
Total.....	\$ 395 27

## FURNISHING FUND.

## DEBIT.

To amount overdrawn from Support Fund .....\$ 129 76

## CREDIT.

Superintendent's order, number 447 .....	\$ 6 20
Superintendent's order, number 464 .....	33 08
Superintendent's order, number 505 .....	4 55
Superintendent's order, number 506 .....	9 00
Superintendent's order, number 513 .....	42 60
Superintendent's order, number 562 .....	12 02
Superintendent's order, number 625 .....	3 25
Superintendent's order, number 676 .....	17 30
Superintendent's order, number 680 .....	1 70
Interest on order.....	08
Total.....	\$ 129 76

REPAIR FUND.

DEBIT.

To amount overdraft from Support Fund .....\$ 38 50

CREDIT.

Superintendent's order, number 464 .....	\$ 1 50
Superintendent's order, number 507 .....	75
Superintendent's order, number 513 .....	20 00
Superintendent's order, number 573 .....	8 00
Superintendent's order, number 576 .....	8 00
Superintendent's order, number 625 .....	25
Superintendent's order, number 684 .....	2 00
Total.....	<u>\$ 38 50</u>

WATER FUND.

DEBIT.

To amount overdraft from Support Fund .....\$ 22 45

CREDIT.

Superintendent's order, number 556 .....	\$ 5 25
Superintendent's order, number 634 .....	17 20
Total.....	<u>\$ 22 45</u>

COW FUND.

DEBIT.

To amount overdraft from Support Fund .....\$ 20 12

CREDIT.

Superintendent's order, number 461 .....	\$ 20 00
Interest on order.....	12
Total.....	<u>\$ 20 12</u>

SCHOOL-APPARATUS FUND.

DEBIT.

To amount overdraft from Support Fund .....\$ 14 00

CREDIT.

Superintendent's order, number 512 .....	\$ 7 00
Superintendent's order, number 617 .....	7 00
Total.....	<u>\$ 14 00</u>

## DEFICIENCY FUND.

## DEBIT.

To amount overdraft from Support Fund .....\$ 558 51

## CREDIT.

By amount due treasurer, as per last report .....	\$ 18 70
Superintendent's order, number 433 .....	20 00
Superintendent's order, number 496 .....	1 40
Superintendent's order, number 497 .....	4 00
Superintendent's order, number 516 .....	75
Superintendent's order, number 561 .....	3 50
Superintendent's order, number 576 .....	2 50
Superintendent's order, number 681 .....	103 45
Superintendent's order, number 392 .....	20 00
Superintendent's order, number 273 .....	25 00
Superintendent's order, number 409 .....	39 93
Superintendent's order, number 276 .....	30 00
Superintendent's order, number 352 .....	12 00
Superintendent's order, number 391 .....	25 00
Superintendent's order, number 140 .....	20 00
Superintendent's order, number 309 .....	12 00
Superintendent's order, number 393 .....	12 00
Superintendent's order, number 139 .....	25 00
Superintendent's order, number 334 .....	12 05
Superintendent's order, number 407 .....	16 30
Superintendent's order, number 320 .....	3 38
Superintendent's order, number 244 .....	83 33
Superintendent's order, number 308 .....	12 00
Superintendent's order, number 404 .....	4 50
Superintendent's order, number 406 .....	16 19
Superintendent's order, number 381 .....	1 00
Superintendent's order, number 297 .....	3 00
Superintendent's order, number 412 .....	2 35
Superintendent's order, number 367 .....	18 12
Superintendent's order, number 44 .....	5 33
Interest on orders.....	5 73
<b>Total.....</b>	<b>\$ 558 51</b>

## RECAPITULATION.

## A. J. RUSSELL—DEBIT.

To amount received from time of last report to May 1, 1878.....	\$ 4581 00
Amount received from E. R. S. Woodrow.....	52 15
<b>Total.....</b>	<b>\$ 4633 15</b>

## CREDIT.

Superintendent's order, number 234, support fund....	\$ 3454 54
Superintendent's order, number 7, furnishing fund.....	129 76
Superintendent's order, number 8, repair fund.....	38 50
Superintendent's order, number 8, water fund.....	22 45
Superintendent's order, number 8, salary fund.....	395 27
Superintendent's order, number 8, cow fund.....	20 12
Superintendent's order, number 9, school apparatus fund.....	14 00
Superintendent's order, numbers 9 and 10, deficiency fund.....	558 51
<b>Total.....</b>	<b>\$ 4633 15</b>



SUPPORT FUND.

DEBIT.	
To amount received.....	\$ 4581 00
CREDIT.	
Superintendent's order paid .....	\$ 3454 54
Overdraft.....	\$ 1126 46

FURNISHING FUND.

DEBIT.	
To overdraft from support fund.....	\$ 129 76
CREDIT.	
Superintendent's order paid.....	\$ 129 76

REPAIR FUND.

DEBIT.	
To overdraft from support fund.....	\$ 38 50
CREDIT.	
Superintendent's order paid.....	\$ 38 50

WATER FUND.

DEBIT.	
To overdraft from support fund.....	\$ 22 45
CREDIT.	
Superintendent's order paid.....	\$ 22 45

SALARY FUND.

DEBIT.	
To overdraft from support fund.....	\$ 395 27
CREDIT.	
Superintendent's order paid.....	\$ 395 27

COW FUND.

DEBIT.	
To amount of overdraft.....	\$ 20 12
CREDIT.	
Superintendent's order paid.....	\$ 20 12

## SCHOOL APPARATUS FUND.

## DEBIT.

To overdraft from support fund.....\$ 14 00

## CREDIT.

Superintendent's order paid.....\$ 14 00

## DEFICIENCY FUND.

## DEBIT.

To overdraft and amount from Woodrow....\$ 558 51

## CREDIT.

Superintendent' orders paid.....\$ 558 51

## FINANCIAL STATEMENT

*Of the Receipts and Expenditures of the Asylum for Feeble-Minded Children, for the two fiscal years, from October 31, 1877, to September 30, 1879.*

DATE.	SUPPORT FUND—DEBIT.	AMOUNT.
1878.		
	Balance from A. J. Russell.....	\$ 1126 46
May 4	Cash, O. W. Archibald, Superintendent.....	30 00
May 7	State order number 26388.....	973 00
June 8	State order number 26690.....	995 00
June 14	Cash, O. W. Archibald, Superintendent.....	179 68
June 24	Cash, O. W. Archibald, Superintendent.....	65 51
July 5	Cash, O. W. Archibald, Superintendent.....	63 87
July 9	State order number 27058.....	500 00
July 9	State order number 27059.....	525 00
July 13	Interest on State order.....	1 48
July 14	Interest on State order.....	5 50
July 16	Cash, O. W. Archibald, Superintendent.....	60 90
August 8	State order number 27274.....	1033 33
August 22	Interest on State order.....	24 06
Sept. 4	State order number 27573.....	1060 00
Sept. 10	Cash, O. W. Archibald, Superintendent.....	106 80
Sept. 30	Interest on State order.....	6 20
Oct. 1	Cash, O. W. Archibald, Superintendent.....	30 00
Oct. 3	State order number 27767.....	535 00
Oct. 3	State order number 27766.....	535 00
Oct. 3	Interest on State order.....	45
Oct. 14	Interest on State order.....	1 06
Nov. 8	State order number 28114.....	1070 00
Dec. 2	Cash, O. W. Archibald, Superintendent.....	256 15
Dec. 6	State order number 28329.....	500 00
Dec. 6	State order number 28328.....	590 00
1879.		
Jan. 9	State order number 28719.....	1110 00
Jan. 10	Cash, O. W. Archibald, Superintendent.....	159 65
Jan. 13	Cash, O. W. Archibald, Superintendent.....	4 75
Jan. 23	Cash, O. W. Archibald, Superintendent.....	268 35
Feb. 10	Cash, O. W. Archibald, Superintendent.....	169 42
Feb. 12	State order number 29060.....	1136 66
March 7	State order number 29191.....	1170 00
April 5	State order number 29416.....	1210 00
April 12	Cash, O. W. Archibald, Superintendent.....	260 46
May 7	State order number 29634.....	1270 00
May 14	Cash, O. W. Archibald, Superintendent.....	120 00
June 5	State order number 29822.....	1280 00
July 5	State order number 30052.....	1305 00
July 11	Cash, O. W. Archibald, Superintendent.....	207 28
July 12	Cash, O. W. Archibald, Superintendent.....	56 77
August 3	State order number 30366.....	500 00
August 3	State order number 30367.....	808 00
Sept. 8	State order number 30564.....	1330 00
Sept. 11	Cash, O. W. Archibald, Superintendent.....	234 62
Oct. 7	State order number 30718.....	1345 00
Oct. 13	Cash, O. W. Archibald, Superintendent.....	893 92
	Total.....	\$ 24614 38

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
May	3 Supt's order, number 509, and interest, 19 cents.....	\$ 9 99
May	3 Supt's order, number 514, and interest, 2 cents.....	1 47
May	3 Supt's order, number 522, and interest, 3 cents.....	1 78
May	3 Supt's order, number 545 .....	12 00
May	3 Supt's order, number 569 .....	40
May	3 Supt's order, number 574, and interest, 22 cents.....	19 36
May	3 Supt's order, number 575, and interest, 6 cents.....	4 61
May	3 Supt's order, number 577, and interest, 4 cents.....	2 99
May	3 Supt's order, number 582 .....	22 43
May	3 Supt's order, number 592, and interest, 11 cents.....	14 11
May	3 Supt's order, number 614, and interest, 1 cent.....	1 01
May	3 Supt's order, number 620, and interest, 38 cents.....	38 35
May	3 Supt's order, number 629, and interest, 8 cents.....	10 23
May	3 Supt's order, number 640 .....	12 00
May	3 Supt's order, number 649 .....	12 00
May	3 Supt's order, number 653 .....	12 00
May	3 Supt's order, number 656, and interest, 12 cents.....	16 12
May	3 Supt's order, number 661, and interest, 3 cents.....	5 82
May	3 Supt's order, number 662, and interest, 2 cents.....	9 22
May	3 Supt's order, number 679 .....	80
May	3 Supt's order, number 688 .....	1 15
May	3 Supt's order, number 691 .....	12 00
May	3 Supt's order, number 692 .....	12 00
May	3 Supt's order, number 693 .....	12 00
May	3 Supt's order, number 694 .....	12 00
May	3 Supt's order, number 703 .....	18 00
May	3 Supt's order, number 704 .....	20 00
May	3 Supt's order, number 718 .....	45 76
May	3 Supt's order, number 726 .....	26 46
May	4 Supt's order, number 441, and interest, 9 cents.....	5 37
May	4 Supt's order, number 448, and interest, 12 cents.....	8 27
May	4 Supt's order, number 463, and interest, 20 cents.....	8 90
May	4 Supt's order, number 465, and interest, 15 cents .....	6 95
May	4 Supt's order, number 468, and interest, 18 cents.....	8 18
May	4 Supt's order, number 501, and interest, 13 cents.....	7 13
May	4 Supt's order, number 503, and interest, 44 cents.....	22 55
May	4 Supt's order, number 508, and interest, 1 cent.....	89
May	4 Supt's order, number 520, and interest, 4 cents.....	2 54
May	4 Supt's order, number 557 .....	7 50
May	4 Supt's order, number 563 .....	15 75
May	4 Supt's order, number 579, and interest, 1 cent .....	1 06
May	4 Supt's order, number 580, and interest, 6 cents.....	5 26
May	4 Supt's order, number 581, and interest, 3 cents.....	5 08
May	4 Supt's order, number 587, and interest, 3 cents.....	5 23
May	4 Supt's order, number 621, and interest, 4 cents.....	4 29
May	4 Supt's order, number 623, and interest, 11 cents.....	13 31
May	4 Supt's order, number 624 .....	25
May	4 Supt's order, number 666 .....	5 85
May	4 Supt's order, number 667, and interest, 3 cents.....	6 53
May	4 Supt's order, number 669, and interest, 12 cents.....	25 65
May	4 Supt's order, number 671, and interest, 1 cent .....	2 81
May	4 Supt's order, number 672 .....	5 60
May	4 Supt's order, number 678 .....	29 90
May	4 Supt's order, number 697 .....	12 00
May	4 Supt's order, number 728 .....	68 56
May	4 Supt's order, number 729 .....	16 50
May	4 Supt's order, number 730 .....	216 03

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
May	4 Supt's order, number 732 .....	\$ 6 15
May	4 Supt's order, number 734 .....	99 42
May	4 Supt's order, number 735 .....	5 00
May	4 Supt's order, number 738 .....	13 95
May	4 Supt's order, number 740 .....	31 30
May	4 Supt's order, number 747 .....	7 69
May	4 Supt's order, number 748 .....	20 75
May	4 Supt's order, number 752 .....	5 25
May	4 Supt's order, number 753 .....	6 50
May	6 Supt's order, number 420, and interest, 50 cents .....	20 50
May	6 Supt's order, number 422, and interest, 35 cents .....	15 35
May	6 Supt's order, number 432, and interest, 63 cents .....	25 63
May	6 Supt's order, number 434, and interest, 24 cents .....	12 24
May	6 Supt's order, number 436, and interest, 28 cents .....	12 28
May	6 Supt's order, number 438, and interest, 18 cents .....	12 18
May	6 Supt's order, number 446, and interest, 1 cent .....	66
May	6 Supt's order, number 460, and interest, 31 cents .....	14 76
May	6 Supt's order, number 462, and interest, 50 cents .....	20 54
May	6 Supt's order, number 469, and interest, 33 cents .....	14 64
May	6 Supt's order, number 471, and interest, 65 cents .....	29 15
May	6 Supt's order, number 472, and interest, 2 cents .....	1 02
May	6 Supt's order, number 477, and interest, 30 cents .....	15 30
May	6 Supt's order, number 488, and interest, 24 cents .....	12 24
May	6 Supt's order, number 492, and interest, 18 cents .....	12 18
May	6 Supt's order, number 499, and interest, 38 cents .....	20 38
May	6 Supt's order, number 502, and interest, 26 cents .....	14 47
May	6 Supt's order, number 504, and interest, 6 cents .....	4 71
May	6 Supt's order, number 506, and interest, 12 cents .....	6 27
May	6 Supt's order, number 529, and interest, 9 cents .....	5 09
May	6 Supt's order, number 531, and interest, 18 cents .....	12 18
May	6 Supt's order, number 532, and interest, 18 cents .....	12 18
May	6 Supt's order, number 542, and interest, 14 cents .....	10 14
May	6 Supt's order, number 546, and interest, 12 cents .....	12 12
May	6 Supt's order, number 548, and interest, 13 cents .....	15 13
May	6 Supt's order, number 550, and interest, 7 cents .....	5 07
May	6 Supt's order, number 551, and interest, 10 cents .....	7 10
May	6 Supt's order, number 552, and interest, 38 cents .....	26 32
May	6 Supt's order, number 554, and interest, 28 cents .....	20 28
May	6 Supt's order, number 556, and interest, 27 cents .....	20 45
May	6 Supt's order, number 578, and interest, 43 cents .....	34 95
May	6 Supt's order, number 583, and interest, 21 cents .....	16 75
May	6 Supt's order, number 585, and interest, 4 cents .....	3 04
May	6 Supt's order, number 589 .....	5 68
May	6 Supt's order, number 609, and interest, 12 cents .....	12 12
May	6 Supt's order, number 626, and interest, 26 cents .....	33 00
May	6 Supt's order, number 632, and interest, 18 cents .....	18 89
May	6 Supt's order, number 646, and interest, 13 cents .....	25 13
May	6 Supt's order, number 652, and interest, 6 cents .....	12 06
May	6 Supt's order, number 658, and interest, 6 cents .....	20 06
May	6 Supt's order, number 673, and interest, 1 cent .....	5 61
May	6 Supt's order, number 685 .....	5 15
May	6 Supt's order, number 689 .....	1 05
May	6 Supt's order, number 415, and interest, 16 cents .....	6 16
May	6 Supt's order, number 416, and interest, 24 cents .....	9 99
May	6 Supt's order, number 424, and interest, 63 cents .....	25 63
May	6 Supt's order, number 479, and interest, 62 cents .....	25 62
May	6 Supt's order, number 480, and interest, \$1.67 .....	85 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
May	6 Supt's order, number 494, and interest, \$1.40.....	\$ 71 40
May	6 Supt's order, number 539 .....	25 00
May	6 Supt's order, number 711 .....	33 33
May	6 Supt's order, number 712 .....	100 00
May	6 Supt's order, number 743 .....	20 00
May	6 Supt's order, number 746 .....	11 40
May	6 Supt's order, number 745 .....	2 70
May	6 Supt's order, number 744 .....	12 58
May	6 Supt's order, number 741 .....	7 95
May	6 Supt's order, number 737 .....	6 40
May	6 Supt's order, number 733 .....	25
May	6 Supt's order, number 702 .....	16 00
May	6 Supt's order, number 674 .....	7 65
May	6 Supt's order, number 630 .....	3 70
May	6 Supt's order, number 619, and interest, 32 cents.....	32 42
May	6 Supt's order, number 565 .....	13 15
May	6 Supt's order, number 564 .....	3 50
May	6 Supt's order, number 530, and interest, 20 cents.....	13 10
May	6 Supt's order, number 449 .....	3 75
May	7 Supt's order, number 490, and interest, 15 cents.....	12 15
May	7 Supt's order, number 498, and interest, \$1.04 .....	54 04
May	7 Supt's order, number 611, and interest, 2 cents .....	5 52
May	7 Supt's order, number 660 .....	20
May	7 Supt's order, number 707 .....	25 00
May	7 Supt's order, number 725 .....	8 40
May	7 Supt's order, number 755 .....	26 05
May	7 Supt's order, number 759 .....	50
May	7 Supt's order, number 759 .....	23 16
May	13 Supt's order, number 723 .....	5 00
May	13 Supt's order, number 762 .....	7 33
May	18 Supt's order, number 766 .....	5 00
June	12 Supt's order, number 828 .....	1 65
June	12 Supt's order, number 780 .....	12 00
June	12 Supt's order, number 776 .....	12 00
June	12 Supt's order, number 817 .....	255 49
June	12 Supt's order, number 775 .....	12 00
June	12 Supt's order, number 799 .....	4 50
June	12 Supt's order, number 772 .....	1 13
June	12 Supt's order, number 800 .....	2 10
June	12 Supt's order, number 785 .....	18 00
June	12 Supt's order, number 769 .....	2 00
June	12 Supt's order, number 798 .....	6 00
June	12 Supt's order, number 713 .....	4 75
June	12 Supt's order, number 793 .....	33 33
June	12 Supt's order, number 794 .....	100 00
June	12 Supt's order, number 699 .....	15 00
June	12 Supt's order, number 781 .....	15 00
June	12 Supt's order, number 777 .....	12 00
June	12 Supt's order, number 786 .....	20 00
June	12 Supt's order, number 820 .....	5 13
June	13 Supt's order, number 802 .....	24 57
June	13 Supt's order, number 807 .....	14 36
June	13 Supt's order, number 783 .....	12 00
June	13 Supt's order, number 789, and interest, 3 cents .....	25 03
June	13 Supt's order, number 812 .....	17 95
June	13 Supt's order, number 758 .....	5 50
June	13 Supt's order, number 805 .....	107 78

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
June 13	Supt's order, number 801 .....	\$ 4 50
June 13	Supt's order, number 831 .....	28 85
June 13	Supt's order, number 815 .....	17 13
June 13	Supt's order, number 727 .....	29 64
June 13	Supt's order, number 720 .....	3 50
June 13	Supt's order, number 816 .....	6 00
June 13	Supt's order, number 809 .....	1 55
June 13	Supt's order, number 742 ... ..	2 70
June 13	Supt's order, number 811 .....	7 60
June 13	Supt's order, number 814 .....	13 50
June 13	Supt's order, number 818 .....	2 20
June 13	Supt's order, number 806 .....	41 10
June 13	Supt's order, number 826 .....	22 32
June 13	Supt's order, number 773 .....	4 00
June 13	Supt's order, number 810 .....	7 05
June 13	Supt's order, number 808 .....	26 81
June 13	Supt's order, number 756 .....	29 00
June 14	Exchange from Red Oak (Co. Treas.) on State order number 26690.....	1 00
June 14	Supt's order, number 803 .....	1 64
June 15	Supt's order, number 824 .....	17 67
June 15	Supt's order, number 804 .....	12 25
June 15	Supt's order, number 821 .....	1 00
June 15	Supt's order, number 771 .....	4 30
June 20	Supt's order, number 833 .....	50 00
June 29	Supt's order, number 628 and interest, 28 cents.....	16 53
June 29	Supt's order, number 442 and interest, \$6.00....	198 50
July 1	Supt's order, number 840 ..	20 00
July 1	Supt's order, number 854 .....	18 00
July 5	Supt's order, number 862 .....	33 33
July 5	Supt's order, number 863 .....	100 00
July 5	Supt's order, number 830 .....	1 08
July 5	Supt's order, number 825 .....	4 50
July 5	Supt's order, number 842 .....	12 60
July 5	Supt's order, number 827 .....	1 50
July 8	Supt's order, number 750 .....	2 80
July 10	Supt's order, number 888 .....	289 67
July 10	Supt's order, number 880 .....	33 73
July 10	Supt's order, number 866 .....	34 34
July 10	Supt's order, number 870 .....	9 40
July 10	Supt's order, number 889 ..	1 90
July 10	Supt's order, number 841 .....	36 00
July 10	Supt's order, number 844 .....	12 00
July 10	Supt's order, number 763 .....	1 60
July 10	Supt's order, number 847 .....	12 00
July 10	Supt's order, number 855 .....	20 00
July 10	Supt's order, number 849 .....	11 91
July 10	Supt's order, number 877 .....	111 65
July 10	Supt's order, number 878 .....	3 35
July 10	Supt's order, number 838 .....	41 18
July 10	Supt's order, number 865 .....	32 82
July 10	Supt's order, number 872 .....	12 81
July 10	Supt's order, number 850 .....	12 00
July 10	Supt's order, number 869 .....	21 65
July 10	Supt's order, number 722 .....	9 00
July 10	Supt's order, number 848 .....	12 00
July 10	Supt's order, number 884 .....	13 45
July 10	Supt's order, number 858 .....	25 00



## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
July 10	Supt's order, number 887 .....	\$ 27 08
July 10	Supt's order, number 864 .....	14 00
July 10	Supt's order, number 867 .....	20 54
July 10	Supt's order, number 879 .....	4 70
July 10	Supt's order, number 819 .....	5 05
July 11	Supt's order, number 868 .....	6 35
July 11	Supt's order, number 873 .....	91 91
July 11	Supt's order, number 898 .....	10 35
July 12	Supt's order, number 901 .....	4 50
July 13	Supt's order, number 890 .....	3 25
July 13	Supt's order, number 875 .....	12 25
July 13	Supt's order, number 897 .....	3 00
July 13	Supt's order, number 894 .....	1 60
July 13	Supt's order, number 892 .....	10 31
July 13	Supt's order, number 905 .....	33 81
July 13	Supt's order, number 813 .....	7 70
July 13	Supt's order, number 904 .....	9 00
July 13	Supt's order, number 874 .....	6 77
July 13	Supt's order, number 886 .....	6 96
July 13	Supt's order, number 895 .....	1 00
July 13	Supt's order, number 908 .....	3 50
July 13	Supt's order, number 911 .....	17 50
August 3	Supt's order, number 910 .....	4 80
August 3	Supt's order, number 943 .....	33 33
August 3	Supt's order, number 944 .....	100 00
August 3	Supt's order, number 942 .....	1 00
August 3	Supt's order, number 916 .....	22 16
August 3	Supt's order, number 891 .....	30
August 10	Supt's order, number 977 .....	21 19
August 10	Supt's order, number 972 .....	179 96
August 10	Supt's order, number 958 .....	108 06
August 10	Supt's order, number 947 .....	5 08
August 10	Supt's order, number 973 .....	6 20
August 10	Supt's order, number 962 .....	11 07
August 10	Supt's order, number 921 .....	11 20
August 10	Supt's order, number 917 .....	4 00
August 10	Supt's order, number 883 .....	1 88
August 10	Supt's order, number 902 .....	17 90
August 10	Supt's order, number 939 .....	25 00
August 10	Supt's order, number 934 .....	4 05
August 10	Supt's order, number 952 .....	16 62
August 10	Supt's order, number 926 .....	12 00
August 10	Supt's order, number 852 .....	14 97
August 10	Supt's order, number 912 .....	10 00
August 10	Supt's order, number 927 .....	12 00
August 10	Supt's order, number 936 .....	4 00
August 10	Supt's order, number 950 .....	38 92
August 10	Supt's order, number 925 .....	12 00
August 10	Supt's order, number 935 .....	18 00
August 10	Supt's order, number 899 .....	5 45
August 10	Supt's order, number 966 .....	45 41
August 10	Supt's order, number 956 .....	16 10
August 10	Supt's order, number 961 .....	2 25
August 10	Supt's order, number 955 .....	8 00
August 10	Supt's order, number 954 .....	50
August 10	Supt's order, number 969 .....	24 50
August 10	Supt's order, number 976 .....	10 40



## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
August 10	Supt's order, number 948 .....	\$ 81 53
August 10	Supt's order, number 971 .....	3 20
August 10	Supt's order, number 946 .....	15 60
August 10	Supt's order, number 983 .....	1 40
August 10	Supt's order, number 953 .....	2 00
August 10	Supt's order, number 922 .....	3 00
August 10	Supt's order, number 957 .....	2 47
August 10	Supt's order, number 900 .....	22 55
August 10	Supt's order, number 970 .....	15 20
August 12	Supt's order, number 984 .....	4 80
August 12	Supt's order, number 986 .....	2 00
August 12	Supt's order, number 931 .....	14 00
August 12	Supt's order, number 968 .....	5 15
August 12	Supt's order, number 985 .....	11 57
August 12	Supt's order, number 960 .....	4 84
August 13	Supt's order, number 951 .....	6 20
August 13	Supt's order, number 914 .....	3 50
August 13	Supt's order, number 963 .....	10 60
August 13	Supt's order, number 959 .....	90
August 13	Supt's order, number 975 .....	16 47
August 13	Supt's order, number 928 .....	12 00
August 13	Supt's order, number 988 .....	9 10
Sept. 10	Supt's order, number 980 .....	1 50
Sept. 10	Supt's order, number 1019 .....	24 00
Sept. 10	Supt's order, number 1006 .....	20 00
Sept. 10	Supt's order, number 1013 .....	33 33
Sept. 10	Supt's order, number 1014 .....	100 00
Sept. 10	Supt's order, number 1016 .....	4 50
Sept. 10	Supt's order, number 1042 .....	9 66
Sept. 10	Supt's order, number 1017 .....	9 00
Sept. 10	Supt's order, number 993 .....	3 93
Sept. 10	Supt's order, number 981 .....	13 50
Sept. 10	Supt's order, number 1020 .....	6 58
Sept. 10	Supt's order, number 1030 .....	145 17
Sept. 10	Supt's order, number 1009 .....	25 00
Sept. 10	Supt's order, number 1024 .....	5 92
Sept. 10	Supt's order, number 1039 .....	9 44
Sept. 10	Supt's order, number 1028 .....	4 27
Sept. 10	Supt's order, number 1029 .....	34 07
Sept. 10	Supt's order, number 1036 .....	30 80
Sept. 10	Supt's order, number 1022 .....	106 95
Sept. 10	Supt's order, number 1035 .....	20 60
Sept. 10	Supt's order, number 1033 .....	5 43
Sept. 10	Supt's order, number 1038 .....	14 70
Sept. 10	Supt's order, number 949 .....	3 80
Sept. 10	Supt's order, number 1039 .....	3 65
Sept. 10	Supt's order, number 1041 .....	3 35
Sept. 10	Supt's order, number 1034 .....	9 20
Sept. 10	Supt's order, number 996 .....	12 00
Sept. 10	Supt's order, number 995 .....	12 00
Sept. 10	Supt's order, number 997 .....	12 00
Sept. 10	Supt's order, number 998 .....	12 00
Sept. 10	Supt's order, number 1021 .....	15 47
Sept. 10	Supt's order, number 1005 .....	18 00
Sept. 10	Supt's order, number 1040 .....	73 29
Sept. 10	Supt's order, number 1031 .....	2 50
Sept. 10	Supt's order, number 909 .....	6 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
Sept. 10	Supt's order, number 965 .....	\$ 17 50
Sept. 10	Supt's order, number 991 .....	1 13
Sept. 10	Supt's order, number 1015 .....	94 60
Sept. 11	Supt's order, number 999 .....	1 50
Sept. 13	Supt's order, number 1045 .....	23 00
Sept. 13	Supt's order, number 1025 .....	9 45
Sept. 13	Supt's order, number 1044 .....	19 25
Oct. 9	Supt's order, number 1105 .....	7 79
Oct. 9	Supt's order, number 1119 .....	9 00
Oct. 9	Supt's order, number 1112 .....	26 95
Oct. 9	Supt's order, number 1118 .....	10 00
Oct. 9	Supt's order, number 1117 .....	10 60
Oct. 9	Supt's order, number 1063 .....	12 00
Oct. 9	Supt's order, number 1064 .....	12 00
Oct. 9	Supt's order, number 932 .....	15 00
Oct. 9	Supt's order, number 1073 .....	20 00
Oct. 9	Supt's order, number 1069 .....	6 60
Oct. 9	Supt's order, number 1001 .....	14 00
Oct. 9	Supt's order, number 1103 .....	20 03
Oct. 9	Supt's order, number 1093 .....	7 90
Oct. 9	Supt's order, number 1099 .....	5 00
Oct. 9	Supt's order, number 1106 .....	21 25
Oct. 9	Supt's order, number 1055 .....	10 40
Oct. 9	Supt's order, number 1090 .....	48 45
Oct. 9	Supt's order, number 1102 .....	14 58
Oct. 9	Supt's order, number 1108 .....	3 40
Oct. 9	Supt's order, number 1088 .....	134 83
Oct. 9	Supt's order, number 1066 .....	14 00
Oct. 9	Supt's order, number 1078 .....	33 33
Oct. 9	Supt's order, number 1079 .....	100 00
Oct. 9	Supt's order, number 1074 .....	25 00
Oct. 9	Supt's order, number 1059 .....	5 90
Oct. 9	Supt's order, number 1058 .....	10 33
Oct. 9	Supt's order, number 1057 .....	5 33
Oct. 9	Supt's order, number 1047 .....	2 10
Oct. 9	Supt's order, number 1051 .....	8 75
Oct. 10	Supt's order, number 1091 .....	106 30
Oct. 10	Supt's order, number 1089 .....	8 29
Oct. 10	Supt's order, number 1023 .....	15 98
Oct. 10	Supt's order, number 1085 .....	12 50
Oct. 10	Supt's order, number 1098 .....	1 00
Oct. 10	Supt's order, number 1050 .....	1 25
Oct. 10	Supt's order, number 1056 .....	8 00
Oct. 10	Supt's order, number 1110 .....	17 57
Oct. 10	Supt's order, number 1099 .....	5 34
Oct. 10	Supt's order, number 1065 .....	12 00
Oct. 10	Supt's order, number 1080 .....	2 00
Oct. 10	Supt's order, number 1114 .....	9 88
Oct. 10	Supt's order, number 1052 .....	12 66
Oct. 10	Supt's order, number 1083 .....	28 99
Oct. 10	Supt's order, number 1096 .....	6 30
Oct. 10	Supt's order, number 1100 .....	24 47
Oct. 10	Supt's order, number 1116 .....	47
Oct. 10	Supt's order, number 1086 .....	22 50
Oct. 10	Supt's order, number 1089 .....	8 00
Oct. 10	Supt's order, number 1081 .....	19 05
Oct. 10	Supt's order, number 1107 .....	22 60

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
Oct. 10	Supt's order, number 1048 .....	\$ 1 00
Oct. 12	Supt's order, number 1122 .....	5 35
Oct. 12	Supt's order, number 1121 .....	4 35
Oct. 12	Supt's order, number 1111 .....	4 50
Oct. 12	Supt's order, number 1113 .....	2 80
Oct. 12	Supt's order, number 1109 .....	4 88
Oct. 12	Supt's order, number 1092 .....	46 09
Oct. 12	Supt's order, number 1120 .....	2 00
Nov. 9	Supt's order, number 1094 .....	1 40
Nov. 9	Supt's order, number 1154 .....	121 85
Nov. 9	Supt's order, number 1170 .....	183 48
Nov. 9	Supt's order, number 1159 .....	52 75
Nov. 9	Supt's order, number 1165 .....	72 75
Nov. 9	Supt's order, number 1101 .....	25 50
Nov. 9	Supt's order, number 1123 .....	12 00
Nov. 9	Supt's order, number 1104 .....	26 00
Nov. 11	Supt's order, number 1169 .....	50 39
Nov. 11	Supt's order, number 1158 .....	5 16
Nov. 11	Supt's order, number 1150 .....	129 39
Nov. 11	Supt's order, number 1152 .....	10 88
Nov. 11	Supt's order, number 1082 .....	5 50
Nov. 11	Supt's order, number 1153 .....	11 25
Nov. 11	Supt's order, number 1168 .....	17 80
Nov. 11	Supt's order, number 1173 .....	22 50
Nov. 11	Supt's order, number 1146 .....	16 50
Nov. 11	Supt's order, number 1151 .....	21 46
Nov. 11	Supt's order, number 1124 .....	12 90
Nov. 11	Supt's order, number 1160 .....	9 28
Nov. 11	Supt's order, number 1156 .....	50 38
Nov. 11	Supt's order, number 1161 .....	3 00
Nov. 11	Supt's order, number 1164 .....	5 30
Nov. 11	Supt's order, number 1095 .....	4 40
Nov. 11	Supt's order, number 1166 .....	66 82
Nov. 11	Supt's order, number 1131 .....	20 00
Nov. 11	Supt's order, number 1126 .....	12 00
Nov. 11	Supt's order, number 1127 .....	20 00
Nov. 11	Supt's order, number 1130 .....	12 00
Nov. 11	Supt's order, number 1004 .....	15 00
Nov. 11	Supt's order, number 1068 .....	15 00
Nov. 11	Supt's order, number 1129 .....	12 00
Nov. 11	Supt's order, number 1062 .....	12 00
Nov. 11	Supt's order, number 1172 .....	3 10
Nov. 11	Supt's order, number 1163 .....	33 90
Nov. 12	Supt's order, number 1174 .....	19 18
Nov. 12	Supt's order, number 1155 .....	18 46
Nov. 12	Supt's order, number 1148 .....	45 00
Nov. 13	Supt's order, number 1177 .....	2 00
Nov. 13	Supt's order, number 1162 .....	66 00
Nov. 13	Supt's order, number 1176 .....	2 00
Nov. 13	Supt's order, number 1175 .....	33 35
Dec. 9	Supt's order, number 1224 .....	1 65
Dec. 9	Supt's order, number 1194 .....	20 00
Dec. 9	Supt's order, number 1196 .....	20 00
Dec. 9	Supt's order, number 1189 .....	100 00
Dec. 9	Supt's order, number 1190 .....	33 33
Dec. 9	Supt's order, number 1195 .....	25 00
Dec. 9	Supt's order, number 1182 .....	9 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
Dec.	9 Supt's order, number 1178 .....	\$ 3 00
Dec.	9 Supt's order, number 1179 .....	10 70
Dec.	10 Supt's order, number 1214 .....	11 79
Dec.	10 Supt's order, number 1215 .....	5 56
Dec.	10 Supt's order, number 1231 .....	21 90
Dec.	10 Supt's order, number 1221 .....	32 44
Dec.	10 Supt's order, number 1167 .....	9 93
Dec.	10 Supt's order, number 1228 .....	1 30
Dec.	10 Supt's order, number 1212 .....	7 99
Dec.	10 Supt's order, number 1227 .....	1 50
Dec.	10 Supt's order, number 1218 .....	28 45
Dec.	10 Supt's order, number 1229 .....	39 40
Dec.	10 Supt's order, number 1232 .....	44 61
Dec.	10 Supt's order, number 1211 .....	39 32
Dec.	10 Supt's order, number 1206 .....	13 00
Dec.	10 Supt's order, number 1239 .....	7 50
Dec.	10 Supt's order, number 1236 .....	12 00
Dec.	10 Supt's order, number 1210 .....	3 00
Dec.	10 Supt's order, number 1226 .....	5 25
Dec.	10 Supt's order, number 1203 .....	12 00
Dec.	10 Supt's order, number 1197 .....	12 00
Dec.	10 Supt's order, number 1125 .....	2 00
Dec.	10 Supt's order, number 1201 .....	14 00
Dec.	10 Supt's order, number 1187 .....	12 00
Dec.	10 Supt's order, number 1204 .....	12 00
Dec.	10 Supt's order, number 1199 .....	12 00
Dec.	10 Supt's order, number 1202 .....	20 00
Dec.	10 Supt's order, number 1186 .....	15 00
Dec.	10 Supt's order, number 1198 .....	3 77
Dec.	10 Supt's order, number 1200 .....	12 00
Dec.	10 Supt's order, number 1217 .....	112 73
Dec.	10 Supt's order, number 1208 .....	6 00
Dec.	10 Supt's order, number 1230 .....	12 65
Dec.	10 Supt's order, number 1207 .....	9 00
Dec.	10 Supt's order, number 1234 .....	12 94
Dec.	10 Supt's order, number 1237 .....	155 30
Dec.	10 Supt's order, number 1205 .....	20 00
Dec.	11 Supt's order, number 1188 .....	14 00
Dec.	11 Supt's order, number 1223 .....	18 00
Dec.	11 Supt's order, number 1220 .....	95
Dec.	11 Supt's order, number 1183 .....	4 30
Dec.	11 Supt's order, number 1209 .....	15 65
Dec.	11 Supt's order, number 1238 .....	10 15
Dec.	11 Supt's order, number 1225 .....	4 75
Dec.	12 Supt's order, number 1181 .....	5 35
Dec.	13 Supt's order, number 1242 .....	5 60
1879.		
Jan.	9 Supt's order, number 1267 .....	2 00
Jan.	9 Supt's order, number 1254 .....	15 00
Jan.	9 Supt's order, number 1240 .....	5 00
Jan.	10 Supt's order, number 1260 .....	25 00
Jan.	10 Supt's order, number 1264 .....	33 33
Jan.	10 Supt's order, number 1265 .....	100 00
Jan.	10 Supt's order, number 1262 .....	30 00
Jan.	10 Supt's order, number 1253 .....	14 00
Jan.	10 Supt's order, number 1248 .....	12 00
Jan.	10 Supt's order, number 1252 .....	12 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
Jan.	9 Supt's order, number 1257 .....	\$ 20 00
Jan.	9 Supt's order, number 1249 .....	12 00
Jan.	9 Supt's order, number 1250 .....	12 00
Jan.	9 Supt's order, number 1251 .....	12 00
Jan.	9 Supt's order, number 1255 .....	20 00
Jan.	9 Supt's order, number 1247 .....	12 00
Jan.	9 Supt's order, number 1258 .....	20 00
Jan.	9 Supt's order, number 1263 .....	30 00
Jan.	11 Supt's order, number 1274 .....	4 40
Jan.	11 Supt's order, number 1294 .....	19 68
Jan.	11 Supt's order, number 1293 .....	30
Jan.	11 Supt's order, number 1284 .....	45 15
Jan.	11 Supt's order, number 1271 .....	10 80
Jan.	11 Supt's order, number 1243 .....	8 67
Jan.	11 Supt's order, number 1268 .....	76 10
Jan.	11 Supt's order, number 1270 .....	19 00
Jan.	11 Supt's order, number 1256 .....	14 00
Jan.	11 Supt's order, number 1279 .....	10 00
Jan.	11 Supt's order, number 1285 .....	2 75
Jan.	11 Supt's order, number 1283 .....	172 64
Jan.	11 Supt's order, number 1272 .....	4 25
Jan.	11 Supt's order, number 1269 .....	108 80
Jan.	11 Supt's order, number 1287 .....	27 58
Jan.	11 Supt's order, number 1277 .....	13 36
Jan.	11 Supt's order, number 1282 .....	28 15
Jan.	11 Supt's order, number 1275 .....	6 50
Jan.	11 Supt's order, number 1276 .....	1 70
Jan.	11 Supt's order, number 1246 .....	20 80
Jan.	11 Supt's order, number 1266 .....	30 20
Jan.	13 Supt's order, number 1302 .....	70
Jan.	13 Supt's order, number 1300 .....	2 00
Jan.	13 Supt's order, number 1301 .....	12 40
Jan.	13 Supt's order, number 1297 .....	66 92
Jan.	13 Supt's order, number 1289 .....	12 55
Jan.	13 Supt's order, number 1273 .....	4 50
Jan.	13 Supt's order, number 1261 .....	30 00
Jan.	13 Supt's order, number 1299 .....	6 00
Jan.	13 Supt's order, number 1292 .....	3 00
Jan.	13 Supt's order, number 1259 .....	20 00
Jan.	13 Supt's order, number 1286 .....	3 00
Jan.	14 Supt's order, number 1303 .....	40 50
Jan.	14 Supt's order, number 1291 .....	85
Jan.	14 Supt's order, number 1290 .....	1 79
Feb.	9 Supt's order, number 1305 .....	8 40
Feb.	9 Supt's order, number 1306 .....	2 00
Feb.	9 Supt's order, number 1307 .....	1 00
Feb.	9 Supt's order, number 1304 .....	2 50
Feb.	9 Supt's order, number 1308 .....	39 45
Feb.	9 Supt's order, number 1309 .....	15 00
Feb.	9 Supt's order, number 1311 .....	29 40
Feb.	9 Supt's order, number 1310 .....	1 63
Feb.	9 Supt's order, number 1278 .....	6 50
Feb.	10 Supt's order, number 1347 .....	66 05
Feb.	10 Supt's order, number 1358 .....	10 80
Feb.	10 Supt's order, number 1326 .....	24 00
Feb.	10 Supt's order, number 1352 .....	12 30
Feb.	10 Supt's order, number 1360 .....	1 35

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
Feb. 10	Supt's order, number 1315 .....	\$ 2 50
Feb. 10	Supt's order, number 1314 .....	1 20
Feb. 10	Supt's order, number 1313 .....	7 65
Feb. 10	Supt's order, number 1332 .....	25 00
Feb. 10	Supt's order, number 1331 .....	20 00
Feb. 10	Supt's order, number 1330 .....	30 00
Feb. 10	Supt's order, number 1338 .....	2 50
Feb. 10	Supt's order, number 1328 .....	33 33
Feb. 10	Supt's order, number 1333 .....	100 00
Feb. 10	Supt's order, number 1349 .....	4 00
Feb. 10	Supt's order, number 1354 .....	9 09
Feb. 10	Supt's order, number 1353 .....	290 96
Feb. 10	Supt's order, number 1339 .....	4 12
Feb. 10	Supt's order, number 1342 .....	4 05
Feb. 10	Supt's order, number 1343 .....	2 00
Feb. 10	Supt's order, number 1346 .....	115 64
Feb. 10	Supt's order, number 1317 .....	20 00
Feb. 10	Supt's order, number 1356 .....	18 45
Feb. 10	Supt's order, number 1327 .....	20 00
Feb. 10	Supt's order, number 1320 .....	14 40
Feb. 10	Supt's order, number 1322 .....	14 00
Feb. 10	Supt's order, number 1321 .....	14 00
Feb. 10	Supt's order, number 1319 .....	12 00
Feb. 10	Supt's order, number 1316 .....	12 00
Feb. 10	Supt's order, number 1318 .....	20 00
Feb. 10	Supt's order, number 1324 .....	12 00
Feb. 10	Supt's order, number 1336 .....	15 00
Feb. 10	Supt's order, number 1335 .....	12 00
Feb. 10	Supt's order, number 1325 .....	12 00
Feb. 10	Supt's order, number 1323 .....	12 00
Feb. 11	Supt's order, number 1329 .....	30 00
Feb. 11	Supt's order, number 1334 .....	30 00
Feb. 11	Supt's order, number 1345 .....	45 19
Feb. 11	Supt's order, number 1355 .....	8 69
Feb. 11	Supt's order, number 1350 .....	5 60
Feb. 11	Supt's order, number 1348 .....	14 20
Feb. 11	Supt's order, number 1296 .....	27 06
Feb. 12	Supt's order, number 1312 .....	9 40
Feb. 12	Supt's order, number 1340 .....	21 71
Feb. 13	Supt's order, number 1359 .....	2 50
Feb. 13	Supt's order, number 1357 .....	3 50
March 10	Supt's order, number 1370 .....	12 00
March 10	Supt's order, number 1373 .....	100 00
March 10	Supt's order, number 1369 .....	12 00
March 10	Supt's order, number 1368 .....	20 00
March 10	Supt's order, number 1384 .....	12 00
March 10	Supt's order, number 1381 .....	12 00
March 10	Supt's order, number 1385 .....	12 00
March 10	Supt's order, number 1367 .....	10 00
March 10	Supt's order, number 1383 .....	15 00
March 10	Supt's order, number 1364 .....	5 20
March 10	Supt's order, number 1382 .....	20 00
March 10	Supt's order, number 1374 .....	14 00
March 10	Supt's order, number 1375 .....	20 00
March 10	Supt's order, number 1366 .....	30 00
March 10	Supt's order, number 1371 .....	12 00
March 10	Supt's order, number 1372 .....	12 00



## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
March 8	Supt's order, number 1377 .....	\$ 30 00
March 8	Supt's order, number 1378 .....	30 00
March 8	Supt's order, number 1363 .....	7 00
March 8	Supt's order, number 1362 .....	22 46
March 8	Supt's order, number 1351 .....	22 88
March 12	Supt's order, number 1389 .....	2 00
March 12	Supt's order, number 1388 .....	153 00
March 12	Supt's order, number 1387 .....	186 00
March 12	Supt's order, number 1386 .....	194 34
March 12	Supt's order, number 1380 .....	20 00
March 12	Supt's order, number 1392 .....	20 73
March 12	Supt's order, number 1390 .....	5 00
March 12	Supt's order, number 1394 .....	108 95
March 12	Supt's order, number 1398 .....	31 30
March 12	Supt's order, number 1395 .....	16 32
March 12	Supt's order, number 1401 .....	30 75
March 12	Supt's order, number 1399 .....	31 31
March 12	Supt's order, number 1396 .....	6 40
March 13	Supt's order, number 1397 .....	18 00
March 13	Supt's order, number 1400 .....	19 72
March 13	Supt's order, number 1391 .....	13 95
March 13	Supt's order, number 1414 .....	13 25
March 13	Supt's order, number 1416 .....	1 25
March 13	Supt's order, number 1403 .....	3 11
March 13	Supt's order, number 1404 .....	2 64
March 13	Supt's order, number 1415 .....	1 71
March 13	Supt's order, number 1405 .....	2 00
March 13	Supt's order, number 1402 .....	20 98
March 13	Supt's order, number 1365 .....	7 35
March 13	Supt's order, number 1407 .....	18 55
March 13	Supt's order, number 1393 .....	4 00
April 10	Supt's order, number 1432 .....	20 00
April 10	Supt's order, number 1441 .....	100 00
April 10	Supt's order, number 1440 .....	33 33
April 10	Supt's order, number 1436 .....	25 00
April 10	Supt's order, number 1469 .....	8 00
April 10	Supt's order, number 1468 .....	37 95
April 10	Supt's order, number 1463 .....	5 50
April 10	Supt's order, number 1420 .....	16 00
April 10	Supt's order, number 1438 .....	30 00
April 10	Supt's order, number 1418 .....	11 10
April 10	Supt's order, number 1417 .....	1 55
April 10	Supt's order, number 1361 .....	1 79
April 10	Supt's order, number 1410 .....	12 00
April 10	Supt's order, number 1379 .....	25 00
April 10	Supt's order, number 1406 .....	13 50
April 10	Supt's order, number 1376 .....	33 33
April 10	Supt's order, number 1474 .....	2 00
April 10	Supt's order, number 1447 .....	8 95
April 10	Supt's order, number 1443 .....	6 00
April 10	Supt's order, number 1449 .....	3 65
April 10	Supt's order, number 1466 .....	45 05
April 10	Supt's order, number 1444 .....	15 43
April 10	Supt's order, number 1459 .....	68 51
April 10	Supt's order, number 1464 .....	12 72
April 10	Supt's order, number 1472 .....	29 79
April 10	Supt's order, number 1442 .....	41 61

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
April 10	Supt's order, number 1426 .....	\$ 12 00
April 10	Supt's order, number 1422 .....	12 00
April 10	Supt's order, number 1433 .....	20 00
April 10	Supt's order, number 1435 .....	20 00
April 10	Supt's order, number 1431 .....	20 00
April 10	Supt's order, number 1425 .....	12 00
April 10	Supt's order, number 1430 .....	15 00
April 10	Supt's order, number 1426 .....	12 00
April 10	Supt's order, number 1429 .....	12 00
April 10	Supt's order, number 1437 .....	30 00
April 10	Supt's order, number 1429 .....	14 00
April 10	Supt's order, number 1434 .....	20 00
April 10	Supt's order, number 1424 .....	12 00
April 10	Supt's order, number 1409 .....	75
April 10	Supt's order, number 1446 .....	5 70
April 10	Supt's order, number 1455 .....	2 00
April 10	Supt's order, number 1419 .....	4 50
April 10	Supt's order, number 1450 .....	120 90
April 10	Supt's order, number 1460 .....	21 80
April 10	Supt's order, number 1462 .....	36 00
April 10	Supt's order, number 1421 .....	12 00
April 10	Supt's order, number 1452 .....	27 10
April 10	Supt's order, number 1465 .....	279 73
April 10	Supt's order, number 1448 .....	11 62
April 10	Supt's order, number 1457 .....	5 97
April 11	Supt's order, number 1451 .....	40 30
April 11	Supt's order, number 1408 .....	15 15
April 11	Supt's order, number 1457 .....	5 07
April 11	Supt's order, number 1454 .....	3 92
April 11	Supt's order, number 1470 .....	20 22
April 11	Supt's order, number 1445 .....	30 60
April 12	Supt's order, number 1458 .....	2 92
April 12	Supt's order, number 1439 .....	30 00
April 12	Supt's order, number 1471 .....	6 00
April 14	Supt's order, number 1473 .....	9 50
May 10	Supt's order, number 1512 .....	1 00
May 10	Supt's order, number 1453 .....	2 50
May 10	Supt's order, number 1513 .....	13 00
May 10	Supt's order, number 1505 .....	23 10
May 10	Supt's order, number 1526 .....	9 75
May 10	Supt's order, number 1525 .....	19 10
May 10	Supt's order, number 1507 .....	17 30
May 10	Supt's order, number 1530 .....	27 85
May 10	Supt's order, number 1529 .....	9 28
May 10	Supt's order, number 1522 .....	16 72
May 10	Supt's order, number 1527 .....	48 75
May 10	Supt's order, number 1506 .....	6 45
May 10	Supt's order, number 1515 .....	4 25
May 10	Supt's order, number 1508 .....	23 20
May 10	Supt's order, number 1510 .....	24 14
May 10	Supt's order, number 1509 .....	1 10
May 10	Supt's order, number 1524 .....	14 85
May 10	Supt's order, number 1501 .....	10 00
May 10	Supt's order, number 1517 .....	233 68
May 10	Supt's order, number 1519 .....	133 77
May 10	Supt's order, number 1521 .....	22 40
May 10	Supt's order, number 1528 .....	79 73



## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
May 10	Supt's order, number 1502.....	\$ 14 40
May 10	Supt's order, number 1484.....	30 00
May 10	Supt's order, number 1486.....	20 00
May 10	Supt's order, number 1495.....	12 00
May 10	Supt's order, number 1491.....	12 00
May 10	Supt's order, number 1500.....	15 00
May 10	Supt's order, number 1494.....	12 00
May 10	Supt's order, number 1492.....	12 00
May 10	Supt's order, number 1493.....	12 00
May 10	Supt's order, number 1496.....	12 00
May 10	Supt's order, number 1497.....	12 00
May 10	Supt's order, number 1499.....	14 00
May 10	Supt's order, number 1489.....	20 00
May 10	Supt's order, number 1488.....	20 00
May 10	Supt's order, number 1478.....	4 25
May 10	Supt's order, number 1477.....	12 00
May 10	Supt's order, number 1423.....	12 00
May 11	Supt's order, number 1523.....	1 35
May 11	Supt's order, number 1516.....	1 50
May 11	Supt's order, number 1476.....	1 50
May 11	Supt's order, number 1511.....	7 35
May 11	Supt's order, number 1487.....	20 00
May 11	Supt's order, number 1490.....	20 00
May 11	Supt's order, number 1485.....	25 00
May 11	Supt's order, number 1480.....	100 00
May 11	Supt's order, number 1481.....	33 33
May 11	Supt's order, number 1482.....	30 00
May 11	Supt's order, number 1483.....	30 00
May 11	Supt's order, number 1504.....	6 91
May 11	Supt's order, number 1518.....	6 65
May 11	Supt's order, number 1531.....	7 50
May 11	Supt's order, number 1498.....	12 00
May 11	Supt's order, number 1503.....	2 36
May 13	Supt's order, number 1520.....	19 60
May 13	Supt's order, number 1532.....	14 70
May 13	Supt's order, number 1514.....	1 00
June 10	Supt's order, number 1543.....	12 00
June 10	Supt's order, number 1542.....	12 00
June 10	Supt's order, number 1558.....	12 00
June 10	Supt's order, number 1546.....	14 00
June 10	Supt's order, number 1550.....	30 00
June 10	Supt's order, number 1551.....	30 00
June 10	Supt's order, number 1545.....	12 00
June 10	Supt's order, number 1557.....	15 00
June 10	Supt's order, number 1555.....	20 00
June 10	Supt's order, number 1553.....	20 00
June 10	Supt's order, number 1539.....	20 00
June 10	Supt's order, number 1556.....	12 00
June 10	Supt's order, number 1541.....	12 00
June 10	Supt's order, number 1544.....	12 00
June 10	Supt's order, number 1554.....	12 00
June 10	Supt's order, number 1552.....	25 00
June 10	Supt's order, number 1540.....	20 00
June 10	Supt's order, number 1549.....	33 33
June 10	Supt's order, number 1548.....	100 00
June 10	Supt's order, number 1538.....	30 00
June 10	Supt's order, number 1535.....	8 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
June 10	Supt's order, number 1537 .....	\$ 5 00
June 10	Supt's order, number 1533 .....	3 00
June 10	Supt's order, number 1534 .....	8 15
June 11	Supt's order, number 1590 .....	20 28
June 11	Supt's order, number 1572 .....	20 74
June 11	Supt's order, number 1574 .....	11 55
June 11	Supt's order, number 1592 .....	28 05
June 11	Supt's order, number 1579 .....	4 70
June 11	Supt's order, number 1594 .....	161 85
June 11	Supt's order, number 1576 .....	78 14
June 11	Supt's order, number 1582 .....	5 30
June 11	Supt's order, number 1587 .....	227 30
June 11	Supt's order, number 1581 .....	1 04
June 11	Supt's order, number 1560 .....	1 14
June 11	Supt's order, number 1591 .....	44 57
June 11	Supt's order, number 1581 .....	3 70
June 11	Supt's order, number 1547 .....	20 00
June 11	Supt's order, number 1571 .....	51 59
June 11	Supt's order, number 1585 .....	22 90
June 11	Supt's order, number 1577 .....	16 95
June 11	Supt's order, number 1586 .....	45 66
June 11	Supt's order, number 1582 .....	12 65
June 11	Supt's order, number 1580 .....	2 00
June 11	Supt's order, number 1584 .....	1 25
June 12	Supt's order, number 1565 .....	14 10
June 12	Supt's order, number 1589 .....	25 36
June 12	Supt's order, number 1573 .....	3 95
June 12	Supt's order, number 1569 .....	21 00
June 12	Supt's order, number 1584 .....	16 77
June 12	Supt's order, number 1578 .....	15 55
June 12	Supt's order, number 1568 .....	3 00
June 12	Supt's order, number 1575 .....	3 00
June 12	Supt's order, number 1567 .....	10 00
June 12	Supt's order, number 1583 .....	1 80
June 13	Supt's order, number 1566 .....	3 00
June 13	Supt's order, number 1570 .....	27 97
June 13	Supt's order, number 1595 .....	8 00
July 10	Supt's order, number 1619 .....	20 00
July 10	Supt's order, number 1609 .....	30 00
July 10	Supt's order, number 1597 .....	2 93
July 10	Supt's order, number 1588 .....	8 50
July 10	Supt's order, number 1598 .....	3 25
July 11	Supt's order, number 1643 .....	159 13
July 11	Supt's order, number 1645 .....	16 33
July 11	Supt's order, number 663 .....	9 11
July 11	Supt's order, number 1628 .....	1 44
July 11	Supt's order, number 1627 .....	2 05
July 11	Supt's order, number 1600 .....	32 20
July 11	Supt's order, number 1634 .....	4 40
July 11	Supt's order, number 1625 .....	1 00
July 11	Supt's order, number 1608 .....	30 00
July 11	Supt's order, number 1606 .....	25 00
July 11	Supt's order, number 1611 .....	100 00
July 11	Supt's order, number 1610 .....	33 33
July 11	Supt's order, number 1630 .....	2 00
July 12	Supt's order, number 1640 .....	24 40
July 12	Supt's order, number 1637 .....	21 60

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
July 12	Supt's order, number 1652 .....	\$ 8 95
July 12	Supt's order, number 1646 .....	27 40
July 12	Supt's order, number 1649 .....	35
July 12	Supt's order, number 1651 .....	6 76
July 12	Supt's order, number 1622 .....	10 00
July 12	Supt's order, number 1635 .....	14 89
July 12	Supt's order, number 1642 .....	3 40
July 12	Supt's order, number 1636 .....	59 56
July 12	Supt's order, number 1644 .....	20 16
July 12	Supt's order, number 1648 .....	3 35
July 12	Supt's order, number 1599 .....	7 00
July 12	Supt's order, number 1632 .....	9 37
July 12	Supt's order, number 1650 .....	9 70
July 12	Supt's order, number 1641 .....	31 17
July 12	Supt's order, number 1633 .....	213 76
July 12	Supt's order, number 1602 .....	12 00
July 12	Supt's order, number 1621 .....	12 00
July 12	Supt's order, number 1649 .....	47 64
July 12	Supt's order, number 1620 .....	20 00
July 12	Supt's order, number 1615 .....	12 00
July 12	Supt's order, number 1626 .....	10 00
July 12	Supt's order, number 1612 .....	20 00
July 12	Supt's order, number 1618 .....	12 00
July 12	Supt's order, number 1624 .....	2 00
July 12	Supt's order, number 1614 .....	12 00
July 12	Supt's order, number 1607 .....	30 00
July 12	Supt's order, number 1604 .....	20 00
July 12	Supt's order, number 1623 .....	12 00
July 12	Supt's order, number 1617 .....	12 00
July 12	Supt's order, number 1613 .....	14 00
July 12	Supt's order, number 1603 .....	15 00
July 12	Supt's order, number 1601 .....	12 00
July 12	Supt's order, number 1627 .....	4 00
July 12	Supt's order, number 1605 .....	12 00
July 12	Supt's order, number 1639 .....	27 44
July 14	Supt's order, number 1616 .....	12 00
July 14	Supt's order, number 1653 .....	10 00
July 14	Supt's order, number 1654 .....	25
July 14	Supt's order, number 1593 .....	4 85
August 11	Supt's order, number 1669 .....	14 00
August 11	Supt's order, number 1703 .....	20 20
August 11	Supt's order, number 1699 .....	3 85
August 11	Supt's order, number 1698 .....	24 35
August 11	Supt's order, number 1710 .....	2 10
August 11	Supt's order, number 1690 .....	10 00
August 11	Supt's order, number 1708 .....	4 90
August 11	Supt's order, number 1701 .....	22 15
August 11	Supt's order, number 1677 .....	12 00
August 11	Supt's order, number 1671 .....	12 00
August 11	Supt's order, number 1678 .....	20 00
August 11	Supt's order, number 1685 .....	174 94
August 11	Supt's order, number 1675 .....	20 00
August 11	Supt's order, number 1695 .....	3 25
August 11	Supt's order, number 1704 .....	181 35
August 11	Supt's order, number 1700 .....	16 14
August 11	Supt's order, number 1706 .....	18 30
August 11	Supt's order, number 1696 .....	9 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
Aug.	11 Supt's order, number 1698	\$ 21 78
Aug.	11 Supt's order, number 1702	43 04
Aug.	11 Supt's order, number 1694	51 25
Aug.	11 Supt's order, number 1705	15 95
Aug.	11 Supt's order, number 1691	20 80
Aug.	11 Supt's order, number 1686	1 35
Aug.	11 Supt's order, number 1684	30 32
Aug.	11 Supt's order, number 1664	30 00
Aug.	11 Supt's order, number 1672	12 00
Aug.	11 Supt's order, number 1638	22 20
Aug.	11 Supt's order, number 1682	8 00
Aug.	11 Supt's order, number 1692	15 00
Aug.	11 Supt's order, number 1696	30 00
Aug.	11 Supt's order, number 1659	16 00
Aug.	11 Supt's order, number 1679	10 60
Aug.	11 Supt's order, number 1660	12 00
Aug.	11 Supt's order, number 1676	20 00
Aug.	11 Supt's order, number 1661	12 00
Aug.	11 Supt's order, number 1674	12 00
Aug.	11 Supt's order, number 1670	12 00
Aug.	11 Supt's order, number 1663	12 00
Aug.	11 Supt's order, number 1673	12 00
Aug.	11 Supt's order, number 1658	23 25
Aug.	11 Supt's order, number 1563	8 00
Aug.	11 Supt's order, number 1631	12 00
Aug.	12 Supt's order, number 1693	3 55
Aug.	12 Supt's order, number 1709	4 40
Aug.	12 Supt's order, number 1667	33 33
Aug.	12 Supt's order, number 1668	100 00
Aug.	12 Supt's order, number 1707	20 75
Aug.	13 Supt's order, number 1683	10 89
Aug.	13 Supt's order, number 1711	41 55
Aug.	16 Supt's order, number 1689	8 50
Aug.	16 Supt's order, number 1692	37 75
Sept.	10 Supt's order, number 1712	20 40
Sept.	10 Supt's order, number 1716	30 00
Sept.	10 Supt's order, number 1715	30 00
Sept.	10 Supt's order, number 1717	12 00
Sept.	10 Supt's order, number 1720	12 00
Sept.	10 Supt's order, number 1718	15 00
Sept.	10 Supt's order, number 1724	12 00
Sept.	10 Supt's order, number 1725	12 00
Sept.	10 Supt's order, number 1713	1 28
Sept.	10 Supt's order, number 1737	18 00
Sept.	10 Supt's order, number 1755	6 50
Sept.	10 Supt's order, number 1714	20 00
Sept.	10 Supt's order, number 1735	16 00
Sept.	10 Supt's order, number 1730	12 00
Sept.	10 Supt's order, number 1729	15 00
Sept.	10 Supt's order, number 1728	7 20
Sept.	10 Supt's order, number 1731	30 00
Sept.	10 Supt's order, number 1742	32 63
Sept.	10 Supt's order, number 1726	12 00
Sept.	10 Supt's order, number 1734	20 00
Sept.	10 Supt's order, number 1760	226 90
Sept.	10 Supt's order, number 1736	20 00
Sept.	10 Supt's order, number 1743	21 45

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1879.		
Sept. 10	Supt's order, number 1746 .....	\$ 32 35
Sept. 10	Supt's order, number 1752 .....	134 47
Sept. 10	Supt's order, number 1754 .....	13 55
Sept. 11	Supt's order, number 1759 .....	48 35
Sept. 11	Supt's order, number 1747 .....	14 85
Sept. 11	Supt's order, number 1753 .....	34 13
Sept. 11	Supt's order, number 1739 .....	2 00
Sept. 11	Supt's order, number 1758 .....	3 90
Sept. 11	Supt's order, number 1727 .....	12 00
Sept. 11	Supt's order, number 1723 .....	12 00
Sept. 11	Supt's order, number 1722 .....	12 00
Sept. 11	Supt's order, number 1744 .....	8 40
Sept. 11	Supt's order, number 1732 .....	33 33
Sept. 11	Supt's order, number 1656 .....	2 50
Sept. 11	Supt's order, number 1680 .....	25 00
Sept. 11	Supt's order, number 1665 .....	30 00
Sept. 11	Supt's order, number 1681 .....	18 50
Sept. 11	Supt's order, number 1719 .....	20 00
Sept. 11	Supt's order, number 1749 .....	40 71
Sept. 11	Supt's order, number 1733 .....	100 00
Sept. 11	Supt's order, number 1757 .....	8 20
Sept. 12	Supt's order, number 1721 .....	14 00
Sept. 12	Supt's order, number 1762 .....	13 40
Sept. 12	Supt's order, number 1756 .....	2 30
Sept. 12	Supt's order, number 1741 .....	43 97
Sept. 12	Supt's order, number 1745 .....	10 00
Sept. 12	Supt's order, number 1751 .....	4 20
Sept. 12	Supt's order, number 1750 .....	4 18
Sept. 13	Supt's order, number 1761 .....	7 05
Sept. 13	Supt's order, number 1740 .....	3 40
Oct. 10	Supt's order, number 1802 .....	4 50
Oct. 10	Supt's order, number 1776 .....	12 00
Oct. 10	Supt's order, number 1780 .....	30 00
Oct. 10	Supt's order, number 1786 .....	12 00
Oct. 10	Supt's order, number 1799 .....	4 00
Oct. 10	Supt's order, number 1788 .....	12 00
Oct. 10	Supt's order, number 1795 .....	12 00
Oct. 10	Supt's order, number 1796 .....	10 00
Oct. 10	Supt's order, number 1777 .....	12 00
Oct. 10	Supt's order, number 1779 .....	20 00
Oct. 10	Supt's order, number 1775 .....	12 00
Oct. 10	Supt's order, number 1794 .....	15 00
Oct. 10	Supt's order, number 1791 .....	20 00
Oct. 10	Supt's order, number 1785 .....	12 00
Oct. 10	Supt's order, number 1767 .....	6 00
Oct. 10	Supt's order, number 1757 .....	1 14
Oct. 10	Supt's order, number 1768 .....	1 60
Oct. 10	Supt's order, number 1766 .....	4 85
Oct. 10	Supt's order, number 1769 .....	2 11
Oct. 10	Supt's order, number 1748 .....	101 35
Oct. 10	Supt's order, number 1763 .....	15 24
Oct. 11	Supt's order, number 1805 .....	6 55
Oct. 11	Supt's order, number 1800 .....	1 75
Oct. 11	Supt's order, number 1833 .....	53 50
Oct. 11	Supt's order, number 1804 .....	33 25
Oct. 11	Supt's order, number 1812 .....	18 10
Oct. 11	Supt's order, number 1809 .....	14 60

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SUPPORT FUND—CREDIT.	AMOUNT.
1878.		
Oct. 11	Supt's order, number 1820 .....	\$ 10 00
Oct. 11	Supt's order, number 1834 .....	2 00
Oct. 11	Supt's order, number 1835 .....	1 34
Oct. 11	Supt's order, number 1772 .....	2 00
Oct. 11	Supt's order, number 1798 .....	30 00
Oct. 11	Supt's order, number 1773 .....	2 00
Oct. 11	Supt's order, number 1782 .....	33 33
Oct. 11	Supt's order, number 1783 .....	100 00
Oct. 11	Supt's order, number 1781 .....	30 00
Oct. 11	Supt's order, number 1801 .....	10 90
Oct. 11	Supt's order, number 1793 .....	20 00
Oct. 11	Supt's order, number 1771 .....	4 50
Oct. 11	Supt's order, number 1784 .....	14 00
Oct. 11	Supt's order, number 1821 .....	31 15
Oct. 11	Supt's order, number 1832 .....	44 75
Oct. 11	Supt's order, number 1790 .....	20 00
Oct. 11	Supt's order, number 1803 .....	3 00
Oct. 11	Supt's order, number 1808 .....	41 58
Oct. 11	Supt's order, number 1826 .....	5 65
Oct. 11	Supt's order, number 1814 .....	278 29
Oct. 11	Supt's order, number 1817 .....	5 50
Oct. 11	Supt's order, number 1819 .....	20 00
Oct. 11	Supt's order, number 1810 .....	56 70
Oct. 11	Supt's order, number 1823 .....	40 11
Oct. 11	Supt's order, number 1827 .....	15 03
Oct. 11	Supt's order, number 1774 .....	2 64
Oct. 11	Supt's order, number 1816 .....	12 95
Oct. 11	Supt's order, number 1778 .....	15 00
Oct. 11	Supt's order, number 1770 .....	10 00
Oct. 11	Supt's order, number 1792 .....	16 00
Oct. 11	Supt's order, number 1825 .....	5 45
Oct. 11	Supt's order, number 1811 .....	13 00
Oct. 11	Supt's order, number 1831 .....	46 90
Oct. 11	Supt's order, number 1830 .....	20 05
Oct. 11	Supt's order, number 1806 .....	10 00
Oct. 11	Supt's order, number 1797 .....	15 00
Oct. 11	Supt's order, number 1829 .....	1 05
Oct. 11	Supt's order, number 1822 .....	21 58
Oct. 11	Supt's order, number 1787 .....	12 00
Oct. 11	Supt's order, number 1824 .....	62 92
Oct. 11	Supt's order, number 1828 .....	134 80
Oct. 11	Supt's order, number 1818 .....	11 25
Oct. 11	Supt's order, number 1838 .....	24 00
Oct. 11	Supt's order, number 1813 .....	2 30
Oct. 11	Supt's order, number 1815 .....	11 90
	Balance.....	617 95
	Total .....	\$ 24614 33
	Balance (in hands of E. R. S. Woodrow).....	\$ 617 95
	Less orders outstanding.....	78 51
		539 44



FINANCIAL STATEMENT—CONTINUED.

Salaries of Teachers, Assistant-Teachers, and Attendants.

DATE.	SALARY FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26279.....	\$ 1506 00
June 29	To State order, number 26853.....	1000 00
	Total .....	\$ 2500 00

DATE.	SALARY FUND—CREDIT.	AMOUNT.
1878.		
May 3	Balance A. J. Russell.....	\$ 395 27
May 3	Supt's order, number 648 .....	12 00
May 3	Supt's order, number 695 .....	12 00
May 3	Supt's order, number 696 .....	12 00
May 3	Supt's order, number 700 .....	15 00
May 3	Supt's order, number 706 .....	20 00
May 3	Supt's order, number 708 .....	30 00
May 4	Supt's order, number 701 .....	15 00
May 4	Supt's order, number 705 .....	20 00
May 4	Supt's order, number 710 .....	30 00
May 6	Supt's order, number 427, and interest, 35 cents.....	15 35
May 6	Supt's order, number 419, and interest, 49 cents.....	20 49
May 6	Supt's order, number 435, and interest, 28 cents.....	12 28
May 6	Supt's order, number 421, and interest, 70 cents.....	30 70
May 6	Supt's order, number 485, and interest, 37 cents.....	25 37
May 6	Supt's order, number 487, and interest, 35 cents.....	20 35
May 6	Supt's order, number 489, and interest, 25 cents.....	12 28
May 6	Supt's order, number 533, and interest, 18 cents.....	12 18
May 6	Supt's order, number 541, and interest, 42 cents.....	30 42
May 6	Supt's order, number 543, and interest, 14 cents.....	10 14
May 6	Supt's order, number 553, and interest, 26 cents.....	20 26
May 6	Supt's order, number 603, and interest, 18 cents.....	20 18
May 6	Supt's order, number 641, and interest, 7 cents... ..	15 07
May 6	Supt's order, number 655, and interest, 7 cents.....	15 07
May 6	Supt's order, number 657, and interest, 6 cents.....	20 06
May 6	Supt's order, number 426, and interest, 65 cents.....	30 65
May 6	Supt's order, number 428, and interest, 35 cents.....	15 35
May 6	Supt's order, number 476, and interest, 60 cents.... ..	30 60
May 6	Supt's order, number 481, and interest, 60 cents.....	30 60
May 6	Supt's order, number 483, and interest, 30 cents.....	15 30
May 6	Supt's order, number 709 .....	30 00
May 7	Supt's order, number 534, and interest, 15 cents.....	12 15
May 7	Supt's order, number 606 .....	12 00
May 7	Supt's order, number 642, and interest, 12 cents.....	30 12
May 7	Supt's order, number 650, and interest, 4 cents.....	12 04
June 12	Supt's order, number 790 .....	30 00
June 12	Supt's order, number 788 .....	20 00
June 12	Supt's order, number 787 .....	20 00
June 12	Supt's order, number 782 .....	15 00
June 12	Supt's order, number 778 .....	12 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SALARY FUND—CREDIT.	AMOUNT.
1878.		
June 12	Supt's order, number 791 .....	\$ 30 00
June 12	Supt's order, number 792 .....	30 00
June 13	Supt's order, number 784 .....	15 00
June 13	Supt's order, number 779 .....	12 00
July 1	Supt's order, number 859 .....	30 00
July 10	Supt's order, number 857 .....	20 00
July 10	Supt's order, number 856 .....	20 00
July 10	Supt's order, number 853 .....	15 00
July 10	Supt's order, number 845 .....	12 00
July 10	Supt's order, number 851 .....	14 88
July 11	Supt's order, number 860 .....	30 00
July 13	Supt's order, number 861 .....	30 00
August 3	Supt's order, number 942 .....	30 00
August 10	Supt's order, number 941 .....	30 00
August 10	Supt's order, number 940 .....	30 00
August 10	Supt's order, number 916 .....	21 61
August 10	Supt's order, number 937 .....	20 00
August 10	Supt's order, number 930 .....	12 00
August 10	Supt's order, number 934 .....	15 00
August 10	Supt's order, number 856 .....	12 00
August 10	Supt's order, number 938 .....	20 00
August 10	Supt's order, number 929 .....	12 00
Sept. 10	Supt's order, number 1002 .....	15 00
Sept. 10	Supt's order, number 1011 .....	30 00
Sept. 10	Supt's order, number 1012 .....	30 00
Sept. 10	Supt's order, number 1010 .....	30 00
Sept. 10	Supt's order, number 1007 .....	20 00
Sept. 10	Supt's order, number 1003 .....	15 00
Sept. 10	Supt's order, number 1000 .....	12 00
Sept. 10	Supt's order, number 999 .....	12 00
Sept. 10	Supt's order, number 933 .....	15 00
Oct. 9	Supt's order, number 1071 .....	7 33
Oct. 9	Supt's order, number 1061 .....	12 00
Oct. 9	Supt's order, number 1075 .....	30 00
Oct. 9	Supt's order, number 1072 .....	20 00
Oct. 9	Supt's order, number 1008 .....	20 00
Oct. 9	Supt's order, number 1060 .....	12 00
Oct. 9	Supt's order, number 1070 .....	7 33
Oct. 9	Supt's order, number 1067 .....	15 00
Oct. 9	Supt's order, number 1077 .....	30 00
Oct. 9	Supt's order, number 1053 .....	12 66
Oct. 9	Supt's order, number 1054 .....	11 40
Oct. 9	Supt's order, number 1076 .....	30 00
Nov. 9	Supt's order, number 1132 .....	100 00
Nov. 9	Supt's order, number 1139 .....	20 00
Nov. 9	Supt's order, number 1135 .....	30 00
Nov. 9	Supt's order, number 1134 .....	30 00
Nov. 9	Supt's order, number 1133 .....	33 33
Nov. 9	Supt's order, number 1136 .....	30 00
Nov. 9	Supt's order, number 1138 .....	25 00
Nov. 11	Supt's order, number 1145 .....	14 00
Nov. 11	Supt's order, number 1143 .....	12 00
Nov. 11	Supt's order, number 1128 .....	15 00
Nov. 11	Supt's order, number 1144 .....	12 00
Nov. 11	Supt's order, number 1141 .....	20 00
Nov. 11	Supt's order, number 1137 .....	20 00
Nov. 11	Supt's order, number 1142 .....	15 00



## FINANCIAL STATEMENT—CONTINUED.

DATE.	SALARY FUND—CREDIT.	AMOUNT.
1879.		
Nov. 11	Supt's order, number 1140 .....	\$ 12 00
Dec. 9	Supt's order, number 1192 .....	30 00
Dec. 9	Supt's order, number 1193 .....	30 00
Dec. 10	Supt's order, number 1198 .....	16 28
Dec. 11	Supt's order, number 1191 .....	30 00
	Total .....	\$ 2500 00

## FURNISHING FUND.

DATE.	FURNISHING FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26282.....	\$ 1000 00
June 29	To State order, number 26854.....	1000 00
	Total .....	\$ 2000 00

DATE.	FURNISHING FUND—CREDIT.	AMOUNT.
1878.		
May 3	By balance to A. J. Russell.....	\$ 129 76
May 3	Supt's order, number 509 .....	51
May 3	Supt's order, number 514, and interest, 12 cents.....	7 42
May 3	Supt's order, number 522, and interest, 62 cents.....	31 37
May 3	Supt's order, number 569 .....	18 55
May 3	Supt's order, number 574, and interest, 22 cents.....	19 00
May 3	Supt's order, number 575, and interest, 68 cents.....	55 68
May 3	Supt's order, number 577, and interest, 5 cents.....	4 00
May 3	Supt's order, number 582 .....	7 19
May 3	Supt's order, number 614, and interest, 12 cents.....	9 32
May 3	Supt's order, number 620, and interest, 7 cents.....	7 82
May 3	Supt's order, number 629 .....	50
May 3	Supt's order, number 661, and interest, 1 cent.....	3 21
May 3	Supt's order, number 677, and interest, 1 cent.....	6 66
May 3	Supt's order, number 679 .....	6 50
May 3	Supt's order, number 688 .....	85
May 3	Supt's order, number 690 .....	35
May 3	Supt's order, number 726 .....	4 00
May 4	Supt's order, number 441, and interest, 1 cent.....	61
May 4	Supt's order, number 510 .....	2 00
May 4	Supt's order, number 557 .....	62 75
May 4	Supt's order, number 579, and interest, 7 cents.....	8 92
May 4	Supt's order, number 581, and interest, 4 cents.....	5 84
May 4	Supt's order, number 616, and interest, 6 cents.....	9 06
May 4	Supt's order, number 621, and interest, 3 cents.....	3 28
May 4	Supt's order, number 623, and interest, 1 cent.....	2 26
May 4	Supt's order, number 624 .....	75
May 4	Supt's order, number 666 .....	5 90
May 4	Supt's order, number 730 .....	16 35

## FINANCIAL STATEMENT—CONTINUED.

DATE.	FURNISHING FUND—CREDIT.	AMOUNT.
1878.		
May	4 Supt's order, number 731 .....	\$ 4 85
May	4 Supt's order, number 735 .....	9 40
May	4 Supt's order, number 740 .....	4 25
May	4 Supt's order, number 747 .....	16 25
May	4 Supt's order, number 751 .....	62 95
May	4 Supt's order, number 752 .....	45 10
May	4 Supt's order, number 753 .....	15 20
May	6 Supt's order, number 446, and interest, 3 cents .....	2 53
May	6 Supt's order, number 504 .....	25
May	6 Supt's order, number 506, and interest, 2 cents .....	1 27
May	6 Supt's order, number 566, and interest, 1 cent .....	61
May	6 Supt's order, number 572, and interest, 3 cents .....	2 53
May	6 Supt's order, number 578, and interest, 2 cents .....	1 18
May	6 Supt's order, number 626, and interest, 1 cent .....	1 91
May	6 Supt's order, number 635 .....	1 00
May	6 Supt's order, number 638 .....	1 62
May	6 Supt's order, number 744 .....	1 50
May	6 Supt's order, number 739 .....	1 00
May	6 Supt's order, number 674 .....	75
May	6 Supt's order, number 630 .....	20
May	6 Supt's order, number 619, and interest, 13 cents .....	13 23
May	7 Supt's order, number 725 .....	12 80
May	7 Supt's order, number 755 .....	2 10
May	7 Supt's order, number 757 .....	1 00
May	10 Supt's order, number 716 .....	36 13
May	10 Supt's order, number 714 .....	227 23
May	10 Supt's order, number 750 .....	18 00
May	11 Supt's order, number 721 .....	36 88
June	12 Supt's order, number 817 .....	4 35
June	13 Supt's order, number 795 .....	2 25
June	13 Supt's order, number 815 .....	40
June	13 Supt's order, number 727 .....	58 21
June	13 Supt's order, number 742 .....	11 35
June	13 Supt's order, number 811 .....	6 05
June	13 Supt's order, number 814 .....	1 50
June	13 Supt's order, number 818 .....	7 80
June	13 Supt's order, number 756 .....	17 05
July	5 Supt's order, number 876 .....	2 25
July	5 Supt's order, number 493, and interest, \$13.50 .....	465 40
July	10 Supt's order, number 866 .....	45
July	10 Supt's order, number 870 .....	50
July	10 Supt's order, number 889 .....	13 65
July	10 Supt's order, number 841 .....	9 00
July	10 Supt's order, number 872 .....	50
July	10 Supt's order, number 881 .....	30 70
July	10 Supt's order, number 884 .....	50
July	10 Supt's order, number 887 .....	25
July	10 Supt's order, number 885 .....	75
July	10 Supt's order, number 819 .....	3 85
July	10 Supt's order, number 839 .....	2 00
July	10 Supt's order, number 868 .....	3 90
July	10 Supt's order, number 894 .....	2 00
July	10 Supt's order, number 893 .....	1 10
August	3 Supt's order, number 916 .....	21 61
August	10 Supt's order, number 972 .....	2 75
August	10 Supt's order, number 837 .....	2 30
August	10 Supt's order, number 899 .....	4 10

## FINANCIAL STATEMENT—CONTINUED.

DATE.	FURNISHING FUND—CREDIT.	AMOUNT.
1879.		
Aug. 10	Supt's order, number 966 .....	\$ 5 05
Aug. 10	Supt's order, number 956 .....	1 50
Aug. 10	Supt's order, number 976 .....	9 90
Aug. 10	Supt's order, number 948 .....	2 90
Aug. 10	Supt's order, number 900 .....	5 10
Aug. 10	Supt's order, number 970 .....	4 30
Aug. 12	Supt's order, number 967 .....	6 00
Aug. 12	Supt's order, number 968 .....	25
Aug. 13	Supt's order, number 975 .....	7 20
Sept. 10	Supt's order, number 1042 .....	7 90
Sept. 10	Supt's order, number 1017 .....	7 50
Sept. 10	Supt's order, number 1030 .....	37 31
Sept. 10	Supt's order, number 1028 .....	5 20
Sept. 10	Supt's order, number 1035 .....	2 50
Sept. 10	Supt's order, number 1033 .....	3 60
Sept. 10	Supt's order, number 1041 .....	1 60
Sept. 10	Supt's order, number 1040 .....	2 72
Sept. 10	Supt's order, number 965 .....	1 30
Sept. 11	Supt's order, number 1018 .....	22 95
Oct. 9	Supt's order, number 1105 .....	3 00
Oct. 9	Supt's order, number 1093 .....	20 75
Oct. 9	Supt's order, number 1102 .....	50
Oct. 9	Supt's order, number 1088 .....	1 00
Oct. 9	Supt's order, number 1084 .....	75
Oct. 10	Supt's order, number 1087 .....	1 80
Oct. 10	Supt's order, number 1114 .....	7 20
Oct. 10	Supt's order, number 1049 .....	9 00
Oct. 12	Supt's order, number 1109 .....	9 65
Nov. 9	Supt's order, number 1170 .....	90 00
Nov. 11	Supt's order, number 1157 .....	6 20
Nov. 11	Supt's order, number 1153 .....	3 70
Nov. 12	Supt's order, number 1149 .....	14 35
Nov. 12	Supt's order, number 1147 .....	16 45
Dec. 10	Supt's order, number 1235 .....	14 50
Dec. 10	Supt's order, number 1213 .....	15 00
Dec. 11	Supt's order, number 1223 .....	8 00
1879.		
Jan. 11	Supt's order, number 1287 .....	14 72
	Total .....	\$ 2000 00

## REPAIR FUND.

DATE.	REPAIR FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26280½ .....	\$ 500 00
	Total .....	\$ 500 00

DATE.	REPAIR FUND—CREDIT.	AMOUNT.
1878.		
May 3	By balance A. J. Russell, Ex. Treasurer .....	\$ 38 50
May 3	Supt's order, number 514, and interest, 36 cents .....	19 16

## FINANCIAL STATEMENT—CONTINUED.

DATE.	REPAIR FUND—CREDIT.	AMOUNT.
1878.		
May 3	Supt's order, number 522, and interest, 17 cents.....	\$ 8 87
May 3	Supt's order, number 569 .....	2 25
May 3	Supt's order, number 570. ....	17 92
May 3	Supt's order, number 577, and interest, 11 cents.....	9 96
May 3	Supt's order, number 614, and interest, 5 cents.....	4 65
May 3	Supt's order, number 677, and interest, 2 cents.....	7 49
May 3	Supt's order, number 698 .....	12 00
May 4	Supt's order, number 519, and interest, 42 cents.....	26 20
May 4	Supt's order, number 558, and interest, 10 cents.....	10 48
May 4	Supt's order, number 571, and interest, 9 cents .....	7 31
May 4	Supt's order, number 724 .....	56 30
May 4	Supt's order, number 730 .....	25
May 4	Supt's order, number 749 .....	25 98
May 4	Supt's order, number 751 .....	3 00
May 4	Supt's order, number 752 .....	6 10
May 6	Supt's order, number 506, and interest, 7 cents.....	3 57
May 6	Supt's order, number 664 .....	3 00
May 6	Supt's order, number 741 .....	26 17
May 6	Supt's order, number 733 .....	95
May 6	Supt's order, number 619, and interest, 1 cent.....	1 16
May 7	Supt's order, number 457, and interest, 6 cents.....	1 56
May 7	Supt's order, number 755 .....	10 48
June 13	Supt's order, number 765, and interest, 3 cents.....	5 28
June 13	Supt's order, number 719, and interest, 5 cents.....	16 30
June 13	Supt's order, number 742 .....	5 50
June 13	Supt's order, number 756 .....	39 50
June 15	Supt's order, number 832 ... ..	4 00
July 5	Supt's order, number 754 .....	19 62
July 10	Supt's order, number 888 .....	2 15
July 10	Supt's order, number 882 .....	11 25
July 10	Supt's order, number 889 .....	16 05
July 10	Supt's order, number 881 .....	3 13
July 10	Supt's order, number 883 .....	3 10
July 10	Supt's order, number 819 .....	40
July 13	Supt's order, number 907 .. ..	44 55
August 3	Supt's order, number 891 .....	15 10
August 10	Supt's order, number 976 .....	6 88
August 10	Supt's order, number 900 .....	1 25
August 10	Supt's order, number 970 .....	1 20
August 13	Supt's order, number 975 .....	1 43
	Total .....	\$ 500 00

## SCHOOL APPARATUS AND PIANO.

DATE.	SCHOOL APPARATUS AND PIANO FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26278.....	\$ 600 00
June 29	To State order, number 26855.....	200 00
	Total .....	\$ 800 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	SCHOOL APPARATUS AND PIANO FUND—CREDIT.	AMOUNT.
1878.		
	By balance, A. J. Russell .....	\$ 14 00
May 3	Supt's order, number 522, and interest, 6 cents .....	3 06
May 4	Supt's order, number 672 .....	25
May 4	Supt's order, number 730 .....	4 25
May 4	Supt's order, number 736 .....	6 25
May 6	Supt's order, number 639 .....	1 00
May 6	Supt's order, number 619, and interest, 1 cent. ....	81
May 7	Supt's order, number 660 .....	15 00
May 7	Supt's order, number 725 .....	52 70
May 10	Supt's order, number 716 .....	5 00
May 10	Supt's order, number 715 .....	26 19
June 12	Supt's order, number 768 .....	6 06
June 13	Supt's order, number 811 .....	1 10
June 13	Supt's order, number 774 .....	5 00
June 13	Supt's order, number 756 .....	1 20
June 20	Supt's order, number 767 .....	493 94
June 21	Supt's order, number 687 .....	6 66
June 29	Supt's order, number 843 .....	3 00
July 11	Supt's order, number 835 .....	2 10
July 13	Supt's order, number 874 .....	2 40
August 10	Supt's order, number 966 .....	25
August 12	Supt's order, number 964 .....	1 00
August 12	Supt's order, number 918 .....	5 17
Oct. 9	Supt's order, number 1093 .....	3 75
Oct. 9	Supt's order, number 1046 .....	5 00
Dec. 9	Supt's order, number 1185 .....	1 25
Dec. 10	Supt's order, number 1219 .....	2 75
Dec. 11	Supt's order, number 1180 .....	2 91
Dec. 11	Supt's order, number 1233 .....	2 00
1879.		
Jan. 11	Supt's order, number 1281 .....	14 94
Jan. 11	Supt's order, number 1287 .....	38 00
Jan. 13	Supt's order, number 1298 .....	5 70
Feb. 9	Supt's order, number 1337 .....	22 45
March 13	Supt's order, number 1411 .....	1 50
March 13	Supt's order, number 1413 .....	95
April 10	Supt's order, number 1412 .....	2 50
April 10	Supt's order, number 1467 .....	19 09
May 11	Supt's order, number 1503 .....	20 82
	Total .....	\$ 800 00

## WATER SUPPLY.

DATE.	WATER SUPPLY FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order number 26281 .....	\$ 500 00
	Total .....	\$ 500 00

## FINANCIAL STATEMENT—CONTINUED.

DATE.	WATER SUPPLY FUND—CREDIT.	AMOUNT.
1878.		
	Balance, A. J. Russell .....	\$ 22 45
May 4	Supt's order, number 749 .....	20
May 6	Supt's order, number 526, and interest, 10 cents.....	5 45
May 6	Supt's order, number 636, and interest, 3 cents.....	5 28
June 12	Supt's order, number 823 .....	131 40
June 12	Supt's order, number 822 .....	18 00
June 12	Supt's order, number 817 .....	2 00
June 13	Supt's order, number 818 .....	11 70
June 13	Supt's order, number 770 .....	88 25
June 14	Supt's order, number 796 .....	75
June 21	Supt's order, number 797 .....	2 25
July 10	Supt's order, number 889 .....	75
July 10	Supt's order, number 834 .....	4 15
July 10	Supt's order, number 885 .....	1 20
July 10	Supt's order, number 819 .....	23 85
July 13	Supt's order, number 907 .....	5 76
August 3	Supt's order, number 924 .....	6 75
August 3	Supt's order, number 919 .....	13 65
August 10	Supt's order, number 945 .....	2 00
August 10	Supt's order, number 974 .....	30 14
August 10	Supt's order, number 920 .....	11 55
August 10	Supt's order, number 954 .....	7 50
August 10	Supt's order, number 976 .....	2 75
August 12	Supt's order, number 968 .....	50
August 12	Supt's order, number 985 .....	1 50
August 13	Supt's order, number 959 .....	30
August 13	Supt's order, number 975 .....	65
August 13	Supt's order, number 987 .....	4 97
Sept. 10	Supt's order, number 992 .....	94 07
Oct. 10	Supt's order, number 1116 .....	23
	Total .....	\$ 500 00

## BUILDING FOR GYMNASIUM, SCHOOL ROOM, ETC.

DATE.	GYMNASIUM FUND—DEBIT.	AMOUNT.
1878.		
June 29	To State order, number 26858.....	\$ 3500 00
	Total .....	\$ 3500 00

DATE.	GYMNASIUM FUND—CREDIT.	AMOUNT.
1878.		
June 15	Supt's order, number 796 .....	\$ 4 00
July 10	Supt's order, number 836 .....	1 95
July 12	Supt's order, number 903 .....	1200 00

FINANCIAL STATEMENT—CONTINUED.

DATE.	GYMNASIUM FUND—CREDIT.	AMOUNT.
1878.		
August 3	Supt's order, number 916 .....	\$ 75 64
August 10	Supt's order, number 915 .....	2 50
Sept. 10	Supt's order, number 994 .....	500 00
Sept. 10	Supt's order, number 1032 .....	2 25
Sept. 10	Supt's order, number 1027 .....	3 95
Sept. 10	Supt's order, number 1026 .....	77 88
Sept. 13	Supt's order, number 1044 .....	12 00
Oct. 10	Supt's order, number 1115 .....	500 00
Nov. 11	Supt's order, number 1171 .....	47 90
Dec. 9	Supt's order, number 1184 .....	718 00
Dec. 10	Supt's order, number 1216 .....	64 26
Dec. 11	Supt's order, number 1222 .....	23 05
Dec. 13	Supt's order, number 1241 .....	7 95
1879.		
Jan. 9	Supt's order, number 1244 .....	84 20
Jan. 9	Supt's order, number 1245 .....	2 00
Jan. 11	Supt's order, number 1288 .....	57 06
Jan. 11	Supt's order, number 1280 .....	23 13
Jan. 11	Supt's order, number 1295 .....	42 62
Jan. 13	Supt's order, number 1297 .....	17 60
Feb. 10	Supt's order, number 1344 .....	4 52
March 10	Supt's order, number 1362 .....	27 54
	Total .....	\$ 3500 00

BARN AND FENCE FUND.

DATE.	BARN AND FENCE FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26283 .....	\$ 100 00
June 20	To State order, number 26857 .....	400 00
	Total .....	\$ 500 00

DATE.	BARN AND FENCE FUND—CREDIT.	AMOUNT.
1878.		
June 13	Supt's order, number 818 .....	\$ 1 00
June 13	Supt's order, number 829 .....	349 25
June 13	Supt's order, number 764 .....	25 00
July 10	Supt's order, number 871 .....	4 00
July 10	Supt's order, number 819 .....	40 88
July 13	Supt's order, number 896 .....	8 03
August 10	Supt's order, number 900 .....	18 20
August 12	Supt's order, number 985 .....	1 50
Sept. 10	Supt's order, number 992 .....	37 27
Sept. 10	Supt's order, number 982 .....	10 00
1879.		
Jan. 11	Supt's order, number 1298 .....	4 89
	Total .....	\$ 500 00

## FINANCIAL STATEMENT—CONTINUED.

## LAUNDRY AND APPARATUS, AND WOOD HOUSE FUND.

DATE.	LAUNDRY AND APPARATUS FUND—DEBIT.	AMOUNT.
1878.		
May 7	To State order, number 26389 .....	\$ 1 45 00
June 29	To State order, number 26856 .....	8 55 00
	Total .....	\$ 1000 00

DATE.	LAUNDRY AND APPARATUS FUND—CREDIT.	AMOUNT.
1878.		
May 3	Supt's order, number 514, and interest, 30 cents.....	\$ 14 30
May 6	Supt's order, number 528, and interest, 13 cents.....	7 17
May 10	Supt's order, number 716 .....	42
May 13	Supt's order, number 717 .....	103 50
June 13	Supt's order, number 761 .....	18 00
July 10	Supt's order, number 889 .....	3 50
July 13	Supt's order, number 875 .....	1 00
August 3	Supt's order, number 916 .....	18 48
August 9	Supt's order, number 923 .....	18 25
August 10	Supt's order, number 978 .....	85
August 12	Supt's order, number 985 .....	754 70
August 13	Supt's order, number 990 .....	4 00
August 13	Supt's order, number 989 .....	3 00
Sept. 10	Supt's order, number 1042 .....	10 20
Sept. 10	Supt's order, number 993 .....	85
Sept. 10	Supt's order, number 1041 .....	1 50
Sept. 13	Supt's order, number 1043 .....	3 75
Oct. 9	Supt's order, number 1093 .....	8 95
Oct. 9	Supt's order, number 1106 .....	2 50
Nov. 11	Supt's order, number 1156 .....	23 47
1879.		
Jan. 11	Supt's order, number 1288 .....	1 61
	Total.....	\$ 1000 00

## COW FUND.

DATE.	COW FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26280 .....	\$ 300 00
1879.		
Sept. 11	Cash from Superintendent for sale of cow.....	29 75
	Total.....	\$ 329 75

DATE.	COW FUND—CREDIT.	AMOUNT.
1878.		
May 3	By balance, A. J. Russell.....	\$ 20 12
May 3	Supt's order, number 659 .....	30 00



## FINANCIAL STATEMENT—CONTINUED.

DATE.	COW FUND—CREDIT.	AMOUNT.
1878.		
July 13	Supt's order, number 906 .....	\$ 120 00
August 3	Supt's order, number 913 .....	30 00
1879.		
Feb. 10	Supt's order, number 1341 .....	33 00
April 10	Supt's order, number 1461 .....	25 00
	Balance.....	71 68
	Total .....	\$ 329 75

## DEFICIENCY FUND.

DATE.	DEFICIENCY FUND—DEBIT.	AMOUNT.
1878.		
May 3	To State order, number 26284 .....	\$ 2500 00
	Total .....	\$ 2500 00

DATE.	DEFICIENCY FUND—CREDIT.	AMOUNT.
1878.		
	By balance, A. J. Russell.....	\$ 558 51
May 3	Supt's order, number 450, and interest, \$3.35.....	137 39
May 3	Supt's order, number 413, and interest, 1.07.....	39 32
May 3	Supt's order, number 453, and interest, 1.29 .....	53 05
May 3	Supt's order, number 337, and interest, 1.01.....	29 99
May 3	Supt's order, number 454, and interest, 53 cents.....	21 78
May 3	Supt's order, number 455, and interest, 65 cents.....	27 60
May 3	Supt's order, number 559, and interest, \$1.20.....	93 13
May 3	Supt's order, number 567, and interest, 31 cents.....	25 80
May 4	Supt's order, number 441, and interest, 1 cents.....	56
May 4	Supt's order, number 378, and interest, 32 cents.....	11 82
May 4	Supt's order, number 451, and interest, 20 cents.....	9 00
May 4	Supt's order, number 401, and interest, 60 cents.....	21 25
May 4	Supt's order, number 456, and interest, 73 cents.....	46 28
May 4	Supt's order, number 459, and interest, \$3.00.....	123 60
May 4	Supt's order, number 463, and interest, 3 cents.....	1 33
May 4	Supt's order, number 466 .....	9 00
May 4	Supt's order, number 519, and interest, 14 cents .....	8 94
May 6	Supt's order, number 506, and interest, 77 cents.....	38 67
May 6	Supt's order, number 572, and interest, 18 cents.....	13 61
May 6	Supt's order, number 619, and interest, 10 cents.....	10 60
May 6	Supt's order, number 618, and interest, 32 cents.....	32 97
May 6	Supt's order, number 63, and interest, \$1.01.....	26 01
May 6	Supt's order, number 133, and interest, 1.12.. .....	29 12
May 6	Supt's order, number 145, and interest, 80 cents.....	20 80
May 6	Supt's order, number 146, and interest, 56 cents.....	14 56
May 6	Supt's order, number 147, and interest, 24 cents.....	6 24
May 6	Supt's order, number 163, and interest, 65 cents.....	25 65
May 6	Supt's order, number 165, and interest, \$3.53.....	90 76
May 6	Supt's order, number 171, and interest, 81 cents.....	20 81

## FINANCIAL STATEMENT—CONTINUED.

DATE.	DEFICIENCY FUND—CREDIT.		AMOUNT.
1878.			
May	6	Supt's order, number 174, and interest, \$1.00 .....	\$ 26 00
May	6	Supt's order, number 193, and interest, \$1.00 .....	26 00
May	6	Supt's order, number 205, and interest, \$1.00 .....	26 00
May	6	Supt's order, number 204, and interest, \$1.00 .....	26 00
May	6	Supt's order, number 233, and interest, 41 cents .....	12 41
May	6	Supt's order, number 272, and interest, \$1.01 .....	26 01
May	6	Supt's order, number 277, and interest, 65 cents .....	25 65
May	6	Supt's order, number 298, and interest, 28 cents .....	7 28
May	6	Supt's order, number 301, and interest, 40 cents .....	12 40
May	6	Supt's order, number 304, and interest, \$1.00 .....	26 00
May	6	Supt's order, number 305, and interest, \$1.00 .....	26 00
May	6	Supt's order, number 307, and interest, 36 cents .....	12 36
May	6	Supt's order, number 311, and interest, \$1.18 .....	31 18
May	6	Supt's order, number 321, and interest, 13 cents .....	4 63
May	6	Supt's order, number 335, and interest, 11 cents .....	5 56
May	6	Supt's order, number 341, and interest, 12 cents .....	4 12
May	6	Supt's order, number 347, and interest, 95 cents .....	30 95
May	6	Supt's order, number 350, and interest, 79 cents .....	25 79
May	6	Supt's order, number 356, and interest, 28 cents .....	12 28
May	6	Supt's order, number 370, and interest, 3 cents .....	1 03
May	6	Supt's order, number 375, and interest, 31 cents .....	14 31
May	6	Supt's order, number 383, and interest, 45 cents .....	15 45
May	6	Supt's order, number 95, and interest, 63 cents .....	25 63
May	6	Supt's order, number 278, and interest, \$2.22 .....	90 65
May	6	Supt's order, number 312, and interest, 75 cents .....	30 75
May	6	Supt's order, number 344, and interest, 63 cents .....	25 63
May	6	Supt's order, number 345, and interest, \$2.10 .....	85 43
May	6	Supt's order, number 346, and interest, 75 cents .....	30 75
May	6	Supt's order, number 358, and interest, 38 cents .....	15 38
May	6	Supt's order, number 382, and interest, 75 cents .....	30 75
May	6	Supt's order, number 385, and interest, 63 cents .....	25 63
May	6	Supt's order, number 386, and interest, \$2.75 .....	107 58
May	6	Supt's order, number 387, and interest, 75 cents .....	30 75
May	6	Supt's order, number 261, and interest, \$1.05 .....	30 85
May	7	Supt's order, number 452, and interest, 22 cents .....	9 02
May	7	Supt's order, number 457, and interest, 4 cents .....	1 04
May	7	Supt's order, number 523, and interest, 11 cents .....	5 86
May	7	Supt's order, number 660 .....	1 00
July	5	Supt's order, number 458 .....	3 50
July	13	Supt's order, number 908 .....	2 50
1879.			
Jan.	11	Supt's order, number 1288 .....	1 74
Total .....			\$ 2500 00

## PROVIDENTIAL FUND (OF STATE).

DATE.	PROVIDENTIAL FUND—DEBIT.		AMOUNT.
1879.			
May	17	State order, number 29708, for well .....	\$ 86 50
Sept.	8	State order, number 30563, for range and floor. ....	357 13
Total .....			\$ 443 63

## FINANCIAL STATEMENT—CONTINUED.

DATE.	PROVIDENTIAL FUND—CREDIT.	AMOUNT.
1879.		
May	13 Supt's order, number 1475	\$ 12 00
May	13 Supt's order, number 1479	32 00
June	10 Supt's order, number 1536	42 50
Sept.	11 Supt's order, number 1655	13 50
Sept.	11 Supt's order, number 1687	18 35
Sept.	11 Supt's order, number 1697	10 40
Sept.	11 Supt's order, number 1596	30 00
Sept.	11 Supt's order, number 1599	172 25
Sept.	13 Supt's order, number 1764	4 85
Oct.	10 Supt's order, number 1763	112 78
Total .....		\$ 443 63

## RECAPITULATION.

### SUPPORT FUND.

#### DEBIT.

Balance, A. J. Russell.....	\$ 1126 46
Total receipts.....	23487 87

#### CREDIT.

Total Superintendent's orders, etc....		\$ 23996 38
Balance.....		617 95
Total .....	\$ 24614 33	\$ 24614 33

Balance (in hands of E. R. S. Woodrow) .....	\$ 617 95
Less orders outstanding.....	78 51
	\$ 539 44

### SALARY FUND.

#### DEBIT.

To amount appropriation.....	\$ 2500 00
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#### CREDIT.

Balance, A. J. Russell.....		\$ 395 27
Superintendent's orders and interest .....		2104 73
Total .....	\$ 2500 00	\$ 2500 00

### FURNISHING FUND.

#### DEBIT.

To amount appropriation .....	\$ 2000 00
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#### CREDIT.

Balance, A. J. Russell.....		\$ 129 76
Superintendent's orders and interest .....		1870 24
Total .....	\$ 2000 00	\$ 2000 00

## REPAIR FUND.

## DEBIT.

To appropriation..... \$ 500 00

## CREDIT.

Balance, A. J. Russell.....		\$ 38 50
Superintendent's orders paid, and interest .....		461 50
Total .....	\$ 500 00	\$ 500 00

## SCHOOL FUND.

## DEBIT.

To appropriation..... \$ 800 00

## CREDIT.

Balance, A. J. Russell.....		\$ 14 00
Superintendent's orders and interest .....		786 00
Total .....	\$ 800 00	\$ 800 00

## WATER FUND.

## DEBIT.

To appropriation..... \$ 500 00

## CREDIT.

Balance, A. J. Russell.....		\$ 22 45
Superintendent's orders and interest .....		477 55
Total .....	\$ 500 00	\$ 500 00

## GYMNASIUM FUND.

## DEBIT.

To appropriation .....

	\$ 3500 00
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## CREDIT.

Superintendent's orders paid.....		\$ 3500 00
Total.....	\$ 3500 00	\$ 3500 00

## BARN AND FENCE.

## DEBIT.

To appropriation..... \$ 500 00

## CREDIT.

Superintendent's orders paid.....		\$ 500 00
Total.....	\$ 500 00	\$ 500 00

LAUNDRY AND APPARATUS, ETC.

DEBIT.		
To appropriation .....	\$	1000 00
CREDIT.		
Superintendent's orders paid .....		\$ 1000 00
Total .....	\$	1000 00    \$ 1000 00

COW FUND.

DEBIT.		
To appropriation .....	\$	300 00
To proceeds of cow sold .....		29 75
CREDIT.		
Balance, A. J. Russell .....	\$	20 12
Superintendent's orders paid .....		288 00
Balance .....		71 63
Total .....	\$	329 75    \$ 329 75
Balance (in hands of E. R. S. Woodrow) \$ 71 63		

DEFICIENCY FUND.

DEBIT.		
To appropriation .....	\$	2500 00
CREDIT.		
Balance, A. J. Russell .....	\$	558 51
Superintendent's orders, and interest .....		1941 49
Total .....	\$	2500 000    \$ 2500 00

PROVIDENTIAL FUND.

DEBIT.		
State orders .....	\$	443 63
CREDIT.		
Superintendent's orders .....	\$	443 63
Total .....	\$	443 63    \$ 443 63

E. R. S. WOODROW, *Treasurer.*

DEBIT.

Total cash, support fund.....	\$ 23487 87
Total cash, salary fund.....	2500 00
Total cash, furnishing fund.....	2000 00
Total cash, repair fund.....	500 00
Total cash, school fund.....	800 00
Total cash, water fund.....	500 00
Total cash, gymnasium fund.....	3500 00
Total cash, farm fund.....	500 00
Total cash, laundry fund.....	1000 00
Total cash, cow fund.....	329 75
Total cash, deficiency fund.....	2500 00
To cash, providential fund.....	443 63

CREDIT.

Amount paid, A. J. Russell.....	\$ 52 15
Total orders, support fund.....	23996 38
Total orders, salary fund.....	2104 73
Total orders, furnishing fund.....	1870 24
Total orders, repair fund.....	461 50
Total orders, school fund.....	786 00
Total orders, water fund.....	477 55
Total orders, gymnasium fund.....	3500 00
Total orders, barn fund.....	500 00
Total orders, laundry fund.....	1000 00
Total orders, cow fund.....	238 00
Total orders, deficiency fund.....	1941 49
Total orders, providential fund....	443 63
Balance.....	689 58

Total.....	\$ 38061 25	\$ 38061 25
Balance (in hands of E. R. S. Woodrow, at time of re- port .....	\$ 689 58	
Less orders outstanding.....	78 51	

\$611 07

Respectfully submitted,

E. R. S. WOODROW.

The total amounts paid by me out of the support, and the various special appropriations, can be found on this page. The balances in these funds have been paid by my predecessor, A. J. Russell, Esq.

E. R. S. W.

## C I R C U L A R .

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THIS Institution was established by the Sixteenth General Assembly of the State of Iowa, in the year 1876, and located at Glenwood, in the building formerly occupied by soldiers' orphans.

The object of this institution is to provide special means of improvement to that class of children so deficient in mind, or afflicted with such marked peculiarities of intellect as to deprive them of the benefits and privileges of other educational institutions and ordinary methods of instruction.

The education imparted to this class, includes not only the simple elements of instruction of our common schools, where that is practicable, but embraces a course of training in the more practical matters of every-day life, the cultivation of habits of cleanliness, propriety and self-reliance, and to develop and enlarge their capacity for useful occupations.

To promote these objects, children will receive such education, and such moral and hygienic treatment, as their peculiar and varied conditions demand.

Mental imbecility depends upon some abnormal or imperfectly developed condition of the physical system, a condition in which the nervous organization is especially defective, preventing the harmonious and natural developement of the mental and moral powers.

Idots and imbeciles are feeble in body as well as mind. Their gait and voluntary movements are generally awkward and slow, and their special senses inactive and undeveloped, and are wanting in nervous and muscular power. Physical training and developement, therefore, are essential, in order that their mental improvement is made permanent, hence the importance and necessity of gymnastic and calisthenic exercises in their treatment.



The very feeble power of attention must be cultivated and increased by the most attractive means. The special senses must be trained and educated, vicious habits are to be corrected, and the idea of obedience and moral obligation must be planted and nourished.

Some, who are only backward, and are undeveloped from being misunderstood, or abused, can be brought out and reclaimed by special means. Many others can be arrested in their downward course, made orderly and obedient, docile and industrious; and all can be improved in their general condition and habits.

In order to secure these blessings to this afflicted class, they must have that special care, treatment and instruction, which cannot be obtained in the family at home, or in private medical practice, or by any of the ordinary methods of education; and it is only in some institution, well arranged and directed for the accomplishment of these special objects, that they can receive such benefits. Each individual case must be studied, and treated as its peculiarities demand.

Children between the ages of seven and eighteen, who are feeble-minded, or so deficient in intelligence as to be incapable of receiving instruction at any ordinary school, may be admitted, upon receiving from the Superintendent a certificate of admission.

The special system of instruction, training, and management adhered to in this institution, renders it a desirable residence for all children so deficient in mind, that in consequence are deprived of the ordinary public school privileges.

The parents or guardians of children making special application for admission, will be required to answer, in writing, such questions as the Superintendent may prescribe.

The progress and improvement of our children have been very encouraging, and parents and friends almost invariably have expressed satisfaction with results in the short time their children have been under training.

Our Institution is open daily to visitors and the public, at all reasonable hours, and all are not only cordially invited to visit our school, but earnestly requested to do so.

In order that proper Legislative action may be taken at as early a day as possible for the proper care and training of this unfortunate class of children in Iowa, the Trustees solicit the names and location of all children of this class in the State, between the ages of seven and nineteen years.

The ability of parents to pay support of child in Institution is determined by Board of Supervisors of county of which said child is a resident.

All parents and guardians having children of this class, who are unable to pay tuition, are supported by the State, on receiving from the county board a certificate of their disability to pay said support.

At least three suits and changes of clothing are required when a pupil is admitted, and suitable clothing must be provided by the parents or county during said pupil's residence in Asylum.

O. W. ARCHIBALD, M. D.,

*Supt. Asylum for Feeble-Minded Children, Glenwood, Iowa.*

REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
ASYLUM FOR FEEBLE MINDED CHILDREN  
LOCATED AT  
GLENWOOD.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.



# REPORT

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TO THE EIGHTEENTH GENERAL ASSEMBLY:

YOUR Committee appointed to visit the Asylum for Feeble-Minded Children, at Glenwood, respectfully present the following report:

On the 3d and 4th instant, we visited the Asylum and made as careful an examination of the buildings, grounds, accounts, and general management of the institution, as our time would allow, giving special attention to the questions which we were required to answer by concurrent resolution of the General Assembly. We found that, in the opinion of your committee, the appropriations had been wisely and economically expended, and for the objects for which they were made; that there were no outstanding debts at the close of the biennial period, and that there had not been any diversion of funds.

The following table shows the names of all persons employed, the kind of service they severally perform, and the price paid each per month. All of these persons have their board, fuel, light, and washing, at the expense of the State. A child of the superintendent, about two years old, also boards in the institution. Aside from this child, there is no one not in the employ of the institution receiving anything excepting those for whose benefit the institution is maintained:

NAME.	FOR WHAT PURPOSE EMPLOYED.	Salary per month.
O. W. Archibald . . . . .	Superintendent . . . . .	\$ 100 00
Mrs. S. A. Archibald . . . . .	Matron . . . . .	33 33
Miss Jennie Van Dorin . . . . .	Teacher . . . . .	30 00
Miss Sabrina Archibald . . . . .	Teacher . . . . .	30 00
Miss Lucy Russell . . . . .	Teacher . . . . .	20 00
Miss Laura Baker . . . . .	Teacher . . . . .	20 00
A. C. Rogers . . . . .	Clerk . . . . .	35 00
Miss Emma Brown . . . . .	Housekeeper . . . . .	15 00
Miss Cordelia Barr . . . . .	Supervisor . . . . .	15 00
Mike Mahana . . . . .	General work . . . . .	20 00
Mrs. M. F. Martin . . . . .	Seamstress . . . . .	15 00
Miss Nettie Martin . . . . .	Seamstress . . . . .	12 00
Miss Sadie Wells . . . . .	Attendant . . . . .	12 00
Miss Andrea Hanson . . . . .	Attendant . . . . .	12 00
Miss Mamie De Vore . . . . .	Attendant . . . . .	12 00
Miss Miriam Libby . . . . .	Nurse . . . . .	12 00
Miss Phoenia Helton . . . . .	Cook . . . . .	12 00
Miss Maggie Helton . . . . .	Cook . . . . .	12 00
Miss Lena Hettrick . . . . .	Ironing girl . . . . .	12 00
Mrs. Eliza Gilpen . . . . .	Laundress . . . . .	15 00
Miss Dulcina Stuart . . . . .	Dining-room manager . . . . .	12 00
Martin Lambert . . . . .	Attendant . . . . .	20 00
Joseph Robertson . . . . .	Attendant . . . . .	20 00
Frank E. Doyle . . . . .	Attendant . . . . .	20 00
Robert Burns . . . . .	Outside man . . . . .	18 00
William Martindale . . . . .	Wood-cutter . . . . .	10 00
T. K. Winter . . . . .	Night watch . . . . .	20 00

Your committee feel that they cannot speak too highly of the general management of the institution by those immediately in charge. They were surprised to witness what has already been accomplished in this institution in the way of improving the condition of the class of unfortunates for whose benefit it was founded. The fact has there been practically demonstrated that children who are so imbecile as to be unable to walk about or to feed themselves, or of themselves to supply their simplest wants, can be taught, not only to wait upon themselves, but to become self-supporting by their labor; while not a few of them can be taught the rudiments of an English education.

In the minds of the committee the duty of the State to support the institution does not admit of a doubt. To the regret of the committee the report of the Trustees had not been issued so that we could have the benefit of it in our examinations.

The advance sheets of a portion of one copy was all they had, and that was borrowed of the Superintendent. For most of the facts of interest in relation to the institution, we refer to that report.

We examined and compared the books, and all the vouchers relat-

ing to some of the funds, and nearly all those relating to all the other funds except the support fund, and found them all correct. As to the support fund we simply examined the books and the quarterly settlements made with the Treasurer by the Superintendent and County Auditor, as provided in the act of the Sixteenth General Assembly, creating the institution. These settlements had been regularly made as provided by law and were apparently correct, and were certified by the County Auditor. As it was impracticable at the time to examine fifteen or eighteen hundred bills, each containing numerous items, and as the balances on the books agreed with those statements of settlement we assumed they were correct.

It is proper to say that after the special appropriation for repairs was exhausted accidental breakages and other incidental demands were met by money taken from the support fund; but in the opinion of the committee this was fully warranted by the law, which provides that the fund is for the *support of the institution*.

We also think it right to call the attention of the General Assembly to the fact that the law does not in terms declare how the pupils shall be clothed, nor whether private pupils shall be clothed as well as supported in other respects by the State, on the payment by the parent or guardian of the amount allowed for the monthly support of other pupils.

The Trustees of the institution have construed the law for support not to include clothing. Accordingly, the actual cost of clothing furnished private pupils has been charged to the parents, in addition to \$10.00 per month; and for clothing furnished other pupils, bills have been made out against the counties from which the pupils came. These bills have almost uniformly been paid by the several counties, and the amount has been passed to the support fund from which the money had been taken to purchase the clothing. The committee find that \$2,518.33 were expended for clothing during the biennial period. That of this amount \$1,073.73 had been repaid by counties, and \$538.15 by private persons, before the close of the period; that at the close of the period there was charged to counties \$582.10, most of which has since been paid, and there is still due from private persons, for clothing, \$262.43. The balance of \$61.92 to be accounted for to make up the sum of \$2,518.33, probably represents the amount of clothing and material on hand at the close of the biennial period; but as no invoice was made of the amount on hand at that time this cannot be proved,

though we are informed that there was some material and clothing on hand at that date.

The committee found that there were in attendance 144 pupils, which is more than can be well accommodated with the present conveniences. Every available place is occupied with beds, and still in very many cases two pupils are compelled to sleep on the narrow beds designed for only one.

The school rooms are as full as they can be, and yet there are about twenty boys of a low grade who have no place and no teacher, and who can have only such instruction as an attendant, who is not a teacher, can give for a short time each day.

There are only four teachers in the institution, while there surely ought to be eight, in order to be able to obtain the best results, and with less than six it is hardly possible to get along.

We examined the hogs and cows belonging to the State, at the Asylum, and find them in excellent condition, showing that they were well cared for.

By reference to the report of the Trustees, it will be seen that a majority of them are of the opinion that the institution should be removed to a different location. In this opinion your committee concur. Some of the reasons for our opinion are the following. 1st. There is no water available for the use of the institution except it be pumped from a well 125 deep. To do this, and carry the water up into a tank so as to supply the building, requires a pressure of about seventy-five pounds to the square inch. The institution is provided with a wind-mill to do this pumping, but it requires so strong a breeze to work it that much of the time the pumping must be done by hand; besides all this, it is very doubtful whether sufficient water for the prospective needs of the institution can be got even at that depth. If the institution is to remain where it is, a steam engine to do the pumping will be a necessity.

2d. There is no coal nearer than 140 miles, and the institution is heated with twenty-four wood stoves. It is plain that such an institution ought not to be so heated, both on account of the danger of fire and the danger to the lower grades of pupils. At present, in some rooms wire screens to keep children from falling against the stoves have to be maintained.

Nothing seems clearer to the committee than that when the institution comes to be heated with steam, we shall have to use coal as fuel.



3d. There is no sewerage. The Trustees report that a sewer 1300 feet long might be constructed, emptying into the creek; but this would have to be built across lands not owned by the State nearly the whole way, and would compel, no doubt, the purchase of the lands. Such a sewer, if built, would be likely to fill up unless there were a sufficient water supply to frequently flush the sewer, and this there is not, and we doubt if there could be, even if an engine were provided to do the pumping. The creek into which the proposed sewer would empty is rather a sluggish one, and from the place where the sewer would enter flows along south and west of the town of Glenwood, and not far from it. Thus it will be seen that in the summer season, when the water is apt to be low and the weather hot, the prevailing southwest winds would carry the poisonous exhalations directly toward the town, to the great danger, your committee believe, of the lives and health of the inhabitants.

4th. More land is absolutely necessary to give employment to the boys, and to make it possible to keep a sufficient number of cows to supply the institution with milk, which is an essential article of diet for many of the children. At present the State owns only fifteen acres, and this is not fortunately located. The road to the Asylum is across private property, which the owner is about to fence up. It is true there is still a way to reach the land without crossing private grounds, but it is not convenient. More land can be bought adjoining at from \$30 to \$40 dollars per acre, and residents allege the soil is good; but it is rough and stumpy, and such as no one of your committee would buy for his own use, unless compelled by circumstances.

It will therefore be understood that the recommendations by the committee are made on the theory that the State ought not to put any more money into improvements there than will just suffice for present necessities. What we recommend is not what will meet the wants of the institution, but only what we think ought to be appropriated on the theory above stated. And we believe it would be best for the State to immediately decide the question, whether the present location of the institution shall be the permanent one or not.

One other reason, not heretofore mentioned, for the removal, is the fact that the land of private parties comes up to within a few feet of the main building; and when the new building authorized by the last General Assembly came to be built it was absolutely necessary to buy some ground. Two acres were bought and deeded to the State, but as

there was no fund from which the payment could be legally made, O. W. Archibald, the Superintendent, advanced the money, \$125, which sum, with interest, ought to be repaid. The Superintendent has also, at his own expense, provided a team for the use of the institution ever since it was opened, and a portion of the time two teams while it was necessary to haul the water from town. The team has, however, been fed at the expense of the State.

A team, with a spring wagon suitable for marketing and for carrying the children and guests to and from the depot, your committee regard as a necessity. If the State would furnish a spring wagon, and an arrangement could be made with the Superintendent to keep and use his own team for a reasonable compensation, that would, in the opinion of the committee, be the best thing for the State. Your committee judge a suitable spring wagon could be procured for one hundred and twenty-five dollars; and they estimate that a team and harness, if these have to be bought, would cost two hundred and thirty dollars more.

There is no safe about the institution, and a fire might consume all the books and papers belonging to the institution. We recommend that a fire-proof safe be purchased at a price not to exceed two hundred dollars.

The roof of the old building and much of the plastering, and perhaps some of the floors, will have to be renewed during the biennial period. We recommend for these and other necessary repairs the sum of one thousand dollars.

The distance between the two buildings is about twenty-five yards. Most of the boys sleep in the second story of the new building. Thus in going to bed at night and when they get up and come to wash in the morning, as well as whenever the pupils pass to or from the school-room in the day time, they have to go out of doors. This exposure, even for a few moments, of persons of such low vitality as many of the pupils, your committee think, with the Trustees, must be hurtful. We recommend an appropriation for the purpose of building a covered passage between the buildings. The Trustees ask for five hundred dollars, and we are not sure that this is too much.

The appropriation asked for, for furniture, bedding, etc., we think ought to be allowed. The carpets are several of them worn out, and the bedding they now have would be insufficient were not fires kept up all night.

We think the State, unless it is determined to let the institution permanently remain where it is, ought not to put in steam heating nor build nearly so expensive a cow barn as that asked for by the trustees. We think a suitable shed for the cows can be built on the hillside for one hundred and fifty dollars. Additional school-books and furniture will be needed, and ought to be furnished by the State. The law should be made definite as to how the children are to be clothed. Water must be had, and in view of the great depth from which it must be pumped from the well, and the great advantage in having soft water for the hot water boiler and for bathing and other uses, we think the cheapest and best way is to build one or more large cisterns. There is great need for more room for laundry and a room for drying clothes in bad weather when they cannot be dried out of doors.

Your committee are of the opinion that we ought not to expect 144 children to be properly bathed if we furnish no better opportunity than common tubs to be carried when used to the play rooms, and the water to be carried in pails. If a small room were fitted up with bath-tubs, with proper hot and cold water pipes, as might easily and cheaply be done now that they have a range with boiler, we think the good done would much more than pay. The institution is now supplied with good bread at an expense of less than \$9.00 per capita per year. Your committee are perfectly satisfied that this is cheaper than to provide an oven and a baker, and buy fuel and flour. We do not therefore recommend an appropriation for an oven.

We think the institution needs and ought to have, even in these hard times, for the next biennial period the following:

For salaries and wages.....	\$ 7500
For corridor.....	500
For cisterns.....	500
For repairs .....	1000
For furniture and bedding.....	2500
For cows ...	200
For laundry.....	300
For cow stable.....	150
For buggy .....	125
For team and harness.....	230
For books and school furniture.....	500
For safe .....	200
To reimburse Dr. Archibald for money paid for land.....	140

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\$13845

And now, in submitting our report, permit us again to say that for the opportunities, we think the management is admirable, and the institution one of the most worthy of support of any in the State.

The kindness and attention shown to these poor unfortunate ones by Superintendent, officers and teachers, seem to your committee to merit great praise.

R. M. HAINES,

*On the part of the Senate.*

B. T. SEAMAN.

J. W. HAYDEN,

*Com. on part of the House.*

**REPORT**  
**OF THE**  
**SPECIAL COMMITTEE**

**OF THE**  
**EIGHTEENTH GENERAL ASSEMBLY**

**OF THE**  
**STATE OF IOWA,**

**APPOINTED TO CONSIDER AND REPORT UPON THE QUESTION OF THE  
REMOVAL OF THE ASYLUM FOR FEEBLE-MINDED  
CHILDREN FROM GLENWOOD.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**



## MAJORITY REPORT.

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TO THE EIGHTEENTH GENERAL ASSEMBLY:

Your committee, appointed under concurrent resolution of the general assembly, with instructions "to consider and report upon the question of the removal of the asylum for feeble-minded children at Glenwood, whether or not such removal is desirable," after a careful examination of the buildings, grounds and adjacent territory, and study of the present and future needs and requirements of such institution, respectfully present the following as a majority report:

That in the class of persons known as idiotic, or feeble-minded, the physical training and development are as essential and necessary for their good and welfare as is their mental development and culture, and that the former is not only an aid, but in many cases a necessity, to success in the latter. That the variety of work in gardening and farming occupations, much of which requires neither skill nor very much judgment, is the best employment for feeble-minded persons. The asylum furnishes a market for the produce so raised, and such work becomes an element of economy in the annual expense of the institution. For which reasons we find that good farming land (in amounts proportioned to the size of the institution), adjacent thereto is a necessity for the successful management of such an institution, and is desirable as a measure of economy. The lands adjacent to the asylum as now located are entirely too rough and broken to fill the requirements of a farm for such an institution. That, as a more full and perfect knowledge of the object and capabilities of the institution is acquired by the people of the State, a very much larger percentage of the higher grade of feeble-minded persons will be sent to the institution; hence the pressing necessity for making suitable provision in time to meet the demand of this class for education in physical as well

as mental acquirements. That the increase of such higher grade will occur in the very near future, we think is evidenced by the fact that from Mills county (in which said institution is located) there were received eleven inmates—a much larger number than was received from the most populous counties of the State—many of whom are of the higher grade of such class, and that from many counties none are received but those of the lowest grade, in fact, proper inmates for a custodial and not for an educational institution of this character. This difference as to number we do not attribute to an increased number of such unfortunates in Mills county, but simply to the fact that by reason of their proximity to the institution, the citizens thereof have acquired a knowledge of the advantages to be derived from an attendance in the institution, and hence send a grade of such class as are not sent from other counties.

In regard to the matters of water supply, sewerage, and supply of fuel, we found substantially as stated in the report of the visiting committee, and the same are of very great importance, and that unquestionably a new location of the institution could be made much more advantageous in these particulars and with a saving in the annual expenses therein, than the present location. Yet we consider the same as at present located of secondary importance to the question of having a suitable farm attached to the institution, and the latter question alone was sufficient basis for our conclusion as hereinafter stated.

At the time of the present location of the institution, the same was in a measure experimental in its character, and the expediency of establishing same was questioned by many, and the needs and requirements of such an institution was fully understood by few or none, hence the same were located in buildings owned by the State, designed for other purposes, and but illy adapted for the purposes of such an institution, and the same with the additions and improvements made since the location, are wholly inadequate to meet the present demands and requirements made upon the institution. And we are of opinion that within a very few years room and accommodation for five hundred inmates will be required; that to remodel and add to the present buildings to meet such requirement, will cost as much as to erect new buildings.



We, therefore, find that the "removal" of the Asylum for Feeble-Minded children, at Glenwood, "is desirable," and that for the perfect success of the institution in the purposes for which it was established, its removal is an absolute requisite.

C. HEDGES,

JOHN RUSSELL,

*On part of Senate.*

W. S. RUSSELL,

*On part of the House.*

## MINORITY REPORT.

The minority of the special committee to visit the institution for the feeble-minded at Glenwood, with reference to removal, report that they are opposed to the removal of that institution, for the following reasons:

*First*—The State has established the plan and policy of scattering the various institutions in the different localities in the State, instead of concentrating them at the capital, or other central location; and this institution and the deaf and dumb asylum are the only institutions located in the western half of the State, while several millions of state funds have been expended in the eastern portion of the State in constructing public institutions.

*Second*—For health and beauty of location and pure drinking water no better location than the present could be found in the State. The buildings are erected on a hill, above the low and malarial grounds, where an abundance of pure air, so necessary for this class of persons, is supplied; and the location is as sightly as that on which the new capitol building is now being erected. A careful examination of the facilities for procuring water satisfies us that an abundant supply can be easily furnished by deepening the present well, or by means of a steam pump located not over six or seven hundred feet from the building, to be supplied from a never-failing stream. Fuel is as cheap as at most of the institutions of the State, the price of good dry wood being at the present time but \$2.50 per cord, and coal mines producing the best quality of coal, with veins six feet in thickness, located on the line of the C., B. & Q. R. R. only about 120 miles distant, thus requiring no change in transportation on different lines of road and extra expense caused thereby to furnish an abundant supply of coal.

*Third*—The opportunities for complete and perfect drainage by means of a sewer are afforded by the elevated grounds and the close proximity of a running stream of water.

*Fourth*—The location, taking all things into consideration, we believe to be better than the average location of the other State institutions; and judging the future by the past, as to the locations of these institutions, we believe it to be better than would be secured by a re-location. While an individual mind might perhaps have selected

better locations for every public institution in the State, we are satisfied that in the scramble of different localities the chances would be against securing a better location for this institution by legislative action.

*Fifth*—The fifteen acres of land now owned by the State, and about ten acres more offered to the State for the sum of three hundred dollars, gives an easy ascent to the building and the right-of-way from the public streets of the town, and furnishes a beautiful grove for the pleasure grounds for the inmates of the institution.

*Sixth*—The land adjacent to the land owned by the State is what is known as the alluvial deposit of the Missouri Slope, and surpasses in fertility the average quality of the rich prairie land of the State, and while lands in other localities might be procured for farming purposes more desirable than these lands, yet we see no serious objection in this respect, as from one hundred and twenty to one hundred and sixty acres of land, adjacent to the land owned by the State, of good quality and mostly in a good state of cultivation, can be purchased by the State for thirty dollars per acre. This, we think, would afford an abundant supply of land for farming purposes, and for keeping the necessary stock to furnish the institution a sufficient supply of milk and meat. We are frank to say that we have but little confidence in the plan of carrying on a farm by the inmates of this school. We are of the opinion that to do this would require an attendant for every two or three persons engaged in the business, and that the probable expense would decrease rather than increase the revenues of the State.

*Seventh*—To remove the institution would require a sacrifice of from thirty to forty thousand dollars of State property, and would necessitate the expenditure of as much more to replace this property at another point. The loss to the State would, in our judgment, overbalance any advantages which would arise by a re-location, even if that change could be made to the most available point in the State. The land now owned by the State was donated by the citizens of Mills county, and while this is but of slight importance, it should be considered in any change of location.

T. R. STOCKTON.

J. F. DUNCOMBE.



TENTH BIENNIAL REPORT

OF THE

TRUSTEES, SUPERINTENDENT AND TREASURER

OF THE

IOWA HOSPITAL FOR THE INSANE,

AT

MOUNT PLEASANT,

FOR THE FISCAL YEARS OF 1878 AND 1879.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



IOWA HOSPITAL FOR THE INSANE, }  
AT MOUNT PLEASANT, IOWA, October. 2, 1879. }

*To HIS EXCELLENCY, JOHN H. GEAR, Governor of the State of Iowa:*

SIR—I have the honor herewith to transmit to you, on behalf of the Board of Trustees of the Iowa Hospital for the Insane, at Mount Pleasant, their Tenth Biennial Report, together with the report of the Superintendent, and statistical and other exhibits, showing the operations of the period, and the present condition of the institution.

I have the honor to be, very respectfully,

Your obedient servant,

M. A. CLEAVES, *Secretary.*





# OFFICERS OF THE HOSPITAL.

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## BOARD OF TRUSTEES.

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# TRUSTEES' REPORT.

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IOWA HOSPITAL FOR THE INSANE, }  
AT MOUNT PLEASANT, IOWA, October 2, 1879. }

*To HIS EXCELLENCY, JOHN H. GEAR, Governor of Iowa:*

THE Trustees respectfully submit their tenth biennial report, accompanied by the biennial report of the Superintendent, and the exhibits of the Steward and Treasurer.

All the regular meetings of the Board of Trustees, required by law, have been held during this period, and monthly visits by one or two trustees each intervening month between the regular meetings of the board.

The improvements and repairs have been made under the supervision and direction of the Superintendent, with a free and full interchange of views with the Board. The work is well and substantially done, and has the full approval of the Board, as having been done in the most economical manner, consistent with durability and the character of the work.

The making of a new boiler to correspond with those now in use, was recommended by the Board, under the deliberate conviction that proper temperature is an essential element in the treatment of the sick, especially in hospitals, and that no expense that is required to effect this object can be deemed either misplaced or injudicious. It was barely ready for use, when one of the old boilers became disabled, requiring repairs costing over three hundred dollars (\$300).

The repairing the road north from the entrance-gate to the Hospital Avenue to the railroad switch, was also recommended as being in the line of true economy. The condition of this road has been such that the hauling of several car-loads of ice had to be done with stone drays or boats, straining and laming teams, and with a loss of not less than five tons of ice by melting. Had the Hospital been without a supply

of coal at this time, it would have been impossible to haul enough to keep it running. We were obliged to get corn up from the switch and carried it in sacks to the Avenue gate.

These and other items of expense, since our last report, were paid out of the current-expense fund, to which there has been a saving during the same time by the reduction of the salaries of officers, employes, and laborers, and gas supply, of \$3,167.25.

The Sixteenth General Assembly made an appropriation of five thousand dollars to replace the sub-basement, being so much of the cost estimated by Messrs. Piquenard and Finkbine, as shown by our last report. We recommend the appropriation of the balance of this estimate, eleven thousand two hundred and thirty-seven and 50-100 dollars, believing this work should be completed during the biennial period.

To provide for the protection and wants of the hospital buildings and grounds for the coming biennial period, the Board recommend the appropriation of the following sums, estimates for which, in all cases, except the repairing of the reservoirs and some items under the head of general repairs, will be found practically correct. Aside from the reasons here submitted for the appropriations asked, we respectfully refer you to the accompanying report of the Superintendent, and also for details and expenditures of the appropriations made by the Sixteenth General Assembly:—

For improving grounds by grading and planting ornamental trees, making a good farm road across the valley south of the hospital, including bridge across the creek, and completing stone road to the railroad side-track, \$2,500.

For building a barn forty by one hundred and thirty feet, with substantial stone basement, frame sheds for sheltering stock, and for a cistern, \$4,200.

The barn accommodations are entirely too small. Most of the hay and grain has to be stacked. The plan proposed would place the barn upon a solid stone basement. The location is most convenient for using the basement for storing and sheltering farm implements, and for cattle-stalls.

For building blacksmith shop, \$1,050. The present old wood structure is small and insufficient to store the boiler and smith tools safely, while room is needed to store second-hand iron, piping, and other material, old iron, wrought and cast, that accumulates, and pays well

to protect. It can largely be built out of the best ashlar removed from the sub-basement and made a convenient and durable building.

For new building for smoke-house and for curing and keeping meats and fish, \$1,900. The estimates are for a brick building occupying the present site of the old wood apology, to be set over an ample root-cellar, which is much needed.

For enlargement of filter, \$2,800. To occupy place left vacant for this purpose and for a small addition to the pump-house at the lower reservoir. The water supply comes from spring and fall rains, hence the necessity of the enlargement of the filter, so as to prepare more rapidly the water for pumping into the reservoir, and so utilize the rainfall as to bridge over any ordinary drouth.

For dividing airing-courts and building pavilions, \$1,100. The same rules that require the classification of patients in the hospital wards, apply with equal or greater force when they are out foreexercise in the open air. Those who give strong hopes of final recovery should not be compelled to mix with the vicious and belligerent. The pavilions are needed as a protection from the sun, rain, and damp grass, and to give the full benefit of these airing courts, which have, in their present imperfect state, proved a great sanitary blessing to the patients.

For water-closets for dormitories and airing-courts, \$1,200. Eighteen dormitories have been reconstructed; the old lath and plaster partitions removed and replaced with brick walls, furnished with water-closets and with stone floors laid upon brick arches. The remaining twelve dormitories should be fitted up in the same way, and water-closets built in the airing-courts. These improvements we deem necessary for the common welfare and safety of the occupants and building.

For two drying rooms in the basement of the wings furnished with suitable steam fixtures, \$400. The Hospital, for washing and drying work, is divided into sections covering the whole weekly. In the extreme wings, occupied by the most uncleanly, this work is required to be done daily, and not unfrequently several times in a day. Suitable rooms in the basement, for this purpose, will provide for the daily cleansing of clothing and bedding, without increasing the supply on hand, or subjecting the same to mildew when laid away wet or damp. The extra labor now required for this work, aside from its utility and convenience, is a strong argument in favor of this improvement.

For hose and couplings, \$450. About thirteen hundred feet is needed to give a full supply; about one hundred feet to each fire-plug throughout the building and attics, thus placing this safeguard against fire all through the hospital building.

For wire mattresses and iron bedsteads, \$2,500. These mattresses have been used for some time in other hospitals, and some directors think they are cheaper than straw ticks. This view does not seem extravagant where changes of straw ticks have to be made several times in a week or oftener. They can be used with such bedsteads as are now in use, but in all the wards occupied by destructive persons, the iron bedstead will prove the most economical.

For general repairs, including reservoir walls, and banks, flooring, painting, window guards, steam pipe, etc., \$9,000. The reservoir walls in front of the hospital are broken, displaced, and damaged by the action of the frost four-fifths of the way around the circle. About the same proportion has sunk from one to ten or twelve inches. Four feet inland from this is a cemented wall which holds and retains the water. It will not do to allow this inner wall to be reached by the frost. The Board are not able to place an estimate upon the cost of repairing this wall. A full reservoir would seem the best protection, but the water supply and filtering power are insufficient to do this for only a part of the year. The enlargement of the filter will be a great help in this direction. The lower reservoir has been damaged by the burrowing of muskrats and minks. To repair this, a cemented wall will be required through the center of the embankment, for a considerable distance, down to the rock bottom. The ward and room floors have been in use twenty years. Some of them were originally laid with soft pine, and require relaying soon. We recommend the purchase of five thousand feet of suitable flooring to commence relaying those most worn. The roof, and all the outside wood-work, and window guards, need to be repainted, also some of the wards, and the barns. New window guards are required, and some new steam coils; also damaged and loose plastering needs repairing.

## APPROPRIATIONS ASKED RECAPITULATED.

For balance to complete sub-basement.....	\$ 11,237.50
For improving grounds, planting trees, and grading.....	2,500.00
For building barn.....	4,200.00
For lumber room.....	450.00
For blacksmith shop.....	1,050.00
For smoke and meat house.....	1,900.00
For enlargement of filter.....	2,800.00
For division of airing-courts and pavilions.....	1,100.00
For water-closets for dormitories and airing-courts.....	1,200.00
For drying rooms in basement.....	400.00
For hose and couplings.....	450.00
For wire mattresses and iron bedsteads....	2,500.00
For general repairs.....	9,000.00
Total.....	<u>\$ 38,787.50</u>

The last General Assembly changed the time for drawing funds from the State Treasurer, from monthly to quarterly. This is inconvenient, and seems to the Board less economical, as we are compelled to purchase supplies on credit, which could not occur under the old law of monthly payments.

The Trustees also respectfully suggest, that the changing the time of the meetings of the Board, from the first to the third Wednesday of each quarter, would save much extra labor, and not unfrequently an adjourned meeting. In closing the reports of the present biennial period, no time intervenes between the last day of September and the first day in October, "Wednesday," when the trustees are required to meet.

What provision shall be made for the support and care of all the insane of the State, will be before the public mind until finally disposed of by further legislation. Are not all of this class of unfortunates equally entitled to the protection and care of the State, and to be supplied with attendants, proper medical treatment, comfortable quarters, and clothing, with wholesome food? If so, this cannot reasonably be expected in all county poor-houses. In some of these, they would be subjected to the necessity of occupying close cells, with little or no ventilation, or means of cleanliness, or proper attendance. We submit that such enlargement of the present hospitals as will afford all the room necessary for this purpose, will best harmonize with the moral sentiment of the people, and prove the most econom-

ical, requiring no additional expense for medical service sand only an extension of the pipes for heat and ventilation.

Since the last report of the Board, Dr. Michael Riordan and Dr. Jennie McCowen have resigned, the former to give his attention to the general practice of his profession, and the latter on account of ill health. To take their situations, the Superintendent has procured the services of, and nominated to the Board, Dr. Morris S. Guth and Dr. Eliza B. Phelps, and they were elected and it is believed will perform meritorious services.

In closing this report, the Board desire to bear testimony to the able, vigilant, and untiring manner in which the resident officers are discharging their respective duties, and to the general good condition of the hospital.

T. WHITING.

SAMUEL KLEIN.

D. D. DAVISSON.



## MINORITY REPORT.

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WE, the undersigned members of the Board of Trustees, are unable to concur in all the recommendations of the foregoing report.

We do not doubt the necessity for more hospital room for the proper care and treatment of the insane of the State. The proposed enlargement of this hospital will not meet that want. Possibly a few more patients might be provided for in this way with less expense than in any other way. But when the question of making additional provisions for our insane shall claim legislative attention there are far weightier considerations than the mere matter of dollars and cents that should determine the future policy of the State in this regard.

As one of the undersigned was unavoidably absent at the time the foregoing report was adopted, and has not seen it, it would be manifestly improper to enter upon a discussion of the question without conferring with the other members of the Board, for which there is now no opportunity. Hence we will do no more than to enter our dissent from the views expressed by the majority of the Board upon that subject.

Some of the appropriations asked for could, in our judgment, without detriment to the institution, be omitted and others much reduced. We do not regard it a matter of necessity to build a barn at cost of \$4,000. In many respects it would be desirable and convenient to have sufficient barn room to store all the farm products and necessary fodder for the stock, but by no means indispensable.

We are not convinced of the necessity of enlarging the filter at a cost of \$2,800; nor do we believe \$2,500 should be expended for iron bedsteads and wire mattresses. Conceding, as we do, that the proposed change would be an improvement, we believe it should be made gradually, by making purchases of only so many as may be necessary to

replace those now in use as they may become broken or worn out, and for this purpose an appropriation of \$500. we think, would be sufficient for the next two years.

For improvement of grounds and grading an appropriation of \$1,000. we think, would answer every necessary purpose, and for general repairs a reduction of one-half the amount, in our judgment, should be made; making in all the appropriations asked for in the report for various purposes \$15,000 less than therein recommended.

L. E. FELLOWS.

M. A. CLEAVES.

## SUPERINTENDENT'S REPORT.

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### *To the Board of Trustees :*

I HAVE the honor to present to you the tenth biennial report of the Superintendent of the hospital under your care. During the past two years we have endeavored to carry out the purposes for which the institution was founded, the cure and care of the unfortunate insane. While the cure of such patients as were susceptible of restoration to health has been our first object, I believe the scarcely less important duties of a hospital director and his assistants—the care of the incurable, who compose a large majority of the insane in the country in or out of hospitals, and alleviation of their condition when possible—have not been neglected. A good many obstacles, however, have stood in the way, or have arisen from time to time, which have prevented the realization of all our endeavors; but, nevertheless, a fair proportion of the cases of comparatively recent origin have apparently recovered, many others have derived more or less benefit—some in such degree as to enable them to go away and pursue accustomed avocations with tolerable success, and be at least self-supporting—while all have been comfortably lodged, and generously supplied with wholesome food suited to their various and varying conditions. The sick and those in delicate health, of whom there will be a considerable number in any aggregate of nearly five hundred insane persons, have had some such special attention as their condition required, at night as well as during the day; for those who were able and inclined light work in the field or garden has been provided, or their assistance in various indoor departments invited, opportunities that have been eagerly embraced by many; and for all there have been on numerous occasions agreeable exercises, and entertainments calculated to stimulate healthy and profitable mental action and enlarge the sphere of knowledge, to all of which the officers and employes have contributed unsparing efforts.

In this way the routine of hospital life and usage during the period has proceeded with a minimum of jarring, or discontent, and without the occurrence of any unusual or serious disaster.

Principal among the obstacles or hindrances to greater success and easy administration has been the crowded state of the hospital to a greater or less extent throughout the period, as, indeed, had been the fact for years before; and though I have had something to say on this topic in previous reports, and though it is so well known to yourselves, and the necessarily attending evils thereof, I feel impelled by duty to speak of it again. At the beginning of the period there were six hundred and eight patients lodged in rooms arranged for only three hundred! The number kept on increasing till in the following spring it had reached the almost unparalleled height of six hundred and thirty-eight—the average number of patients in the hospital for the month of April being nearly six hundred and thirty-two! By the transfer of fifty patients to the hospital at Independence, setting off five counties to that hospital district, and the removal by the county authorities, upon order of your Board, of sundry incurable patients, generally those who had been longest resident in the hospital, the number gradually declined to four hundred and twenty-two, the lowest since my last report, which was reached in the latter part of January of the present year. From that date the number has been again rising pretty steadily, and we close the period with four hundred and eighty-two under care.

The disadvantages in general, and the injurious results in many single cases, of such crowding together of patients presenting almost every phase and condition of insanity, with such limited facilities for classification that the convalescent, quiet, and refined are with difficulty kept from contact with those possessing every opposite quality, or those calculated to exert a deleterious influence, are well known to those having much acquaintance with insanity and hospitals for the insane, and may be somewhat appreciated by almost any one who brings to the consideration of the subject a little reflection. All the injury that can flow from a crowded hospital—from the influences that a hospital director will do his utmost to avoid—to retard or prevent recovery, or any degree of improvement possible in better surroundings, has been felt or witnessed every day for the past ten years. It is certain that through such conditions recovery or improvement is greatly retarded, and I don't think it is too much to say that recovery may be

and has been prevented. I have before said that with existing arrangement, and the great number we are almost forced to provide for, we cannot effectually separate and isolate the violent, the dirty, the epileptic, the insane criminals whose influence is often of the worst kind possible, the too great number who are irritable and ill disposed, from those who are refined, sensitive, and inclined, or easily inclined if free from adverse influences, to not only do whatever they may for their own advancement but something to promote the welfare of others also: To think of such things being must surely lead friends of patients to hesitate to place them in a hospital till after other expedients have been tried, or violent and incurable disorder has become fixed in the mental constitution. That this sometimes happens is well known to me. And it is in this way, I have reason to believe, many of the incurable insane that have been or are yet under care have lost the chance of being cured, which is always fair at the outset, if the disorder is without serious complication, if the right remedial measures are applied. It is true enough that many persons stricken with insanity get well, or apparently well, through such care and treatment as they can have at home, or elsewhere than in a hospital arranged and organized for their treatment; but it is also true, in my experience, that a large majority will not so recover; and experience seems to show that persons who appear to recover from mental disorder under other than hospital treatment do not regain that mental integrity or cerebral condition which will enable them to encounter and resist as successfully influences well calculated to throw them off their balance again as those who recover in hospitals seem to do. Consequently we are frequently receiving cases that have had one, two, or three previous attacks, who for one reason or another (often the crowded state of the hospital or its need of classification, reports of which are swift of wing) have been deprived of the most certain means of relief the time and present constitution of society and general medical knowledge afford. If the necessary expense attending the management of insanity in the home of the patient in accordance with the results of, or in the light of the researches and deductions of modern study and experience could generally be borne, it would not be so often necessary or desirable, perhaps, to resort to hospitals for its care and cure as otherwise must and should be done. The skill required to prescribe useful medicinal remedies is not greater for this than for many or most other diseases of equal importance; and a fair endowment of common

sense and good acquaintance with general principles would be a sufficient guide to the selection and application of the proper moral influences and needful restraints. It is true, however, that it may often be more difficult to carry out medical or moral treatment out of a hospital than within it, but it can probably be very well done if cost is not a question for consideration. But it is obvious at a glance that but few can well bear the expense of suitable management of insanity in private families, extending as it does in almost all cases over a period of weeks and months; and it must, therefore, be wise public policy to provide such hospital room as will present a not uninviting appearance, and shall not be crowded with subjects presenting a repulsive aspect to those who may possess a delicately sensitive constitution, or one whose sensitiveness has been heightened by disease: having the architectural design and completeness that will prevent the embarrassment and mischief attending deficient classification, and afford the conveniences and privacy the wealthy are accustomed to and are willing to pay for; maintained upon a scale of expenditure that, while it affords the ordinary comforts and necessities of life, and suitable attention, for those who need only a minimum of care, will furnish everything that can possibly contribute to the care of those who can be cured, and the utmost degree of benefit that is possible to those not susceptible of complete cure. In other words, let sufficient hospital room, embodying principles growing out of the latest and best experience, be provided; give it due official and medical supervision; employ a liberal proportion of attendants of such high character as a liberal compensation, and a liberal compensation only, will command; remove or disguise whatever presents a dreary, cheerless aspect, by a tasteful, though not extravagant, furnishing, so that husband or wife, parent, children, brother, or sister, shall be promptly placed under hospital treatment upon the first invasion of mental disorder, as it is more likely they will be if the existing dread of hospitals, that has some basis in enforced economy to near bare subsistence, can be removed from the public mind; when, I certainly believe, recovery will be far more frequent proportionally, and far more permanent.

It is well known, and widely known, I suppose, that it costs individuals or the public far less to provide what is needful for the curable than to support the incurable—the proportion being not less, probably, than for every one hundred dollars for the former it will be one thousand dollars for the latter; and, if for no higher reason than a pecuni-

ary one, it could but be wise to provide liberally for the treatment of insanity during its early and only curative stage.

Excess of economy in not providing sufficient room for the treatment and care of the insane, and in reducing the cost of treatment and care to near the point of bare subsistence in ordinary life, has had the effect, it seems to me, to prevent recovery, and thus increase the proportion of the insane in the general population. It is not enough that they be fed and clothed, and kept warm and clean; if this were all there would be no problem to be solved that would not be of easy solution. Deprived of reason and discretion in some large degree, as a majority of the insane are—which is especially true of the chronic or incurable insane, prone to impulses not unfrequently of the most dreadful kind and to destructive acts, ever irritable and restless—a large proportion need a large amount of care, and a peculiar care—of a kind calling for the exercise of the higher qualities of head and heart, and the most humane care attainable for them, in public institutions which are a necessity of the time, for the protection of the public as well as a philanthropic prevention of suffering to families as well as individuals, is the very least the public will and should demand. It is required by the spirit of the age as well as by individual sense and feeling, for no one can know how soon or when himself or kin may need it; and all may be sure that while they cannot foresee it their standing is insecure. In addition to proper and humane care for the insane are many things that may be classed under the head of treatment, or curative treatment, besides strictly remedial agents or drugs, that would in life in general be called or classed as recreations, or even a superfluity, among which may be mentioned amusements such as dancing, concerts, games, lectures, magic lantern exhibitions, libraries and miscellaneous reading, social assemblies, carriage riding, etc., all of which in a moderate degree form a part of hospital life here, as well as in other hospitals. Without these accompaniments the necessary restrictions and limitations would become unendurable monotony, while with them residence in a hospital may be deprived of almost all that is dreaded and painful to bear, except the distress attending mental disease and fear of possible consequences, and even this distress and fear is greatly mitigated. It may therefore be seen that something more is expended than what is required simply for subsistence—food and clothing, cleanliness and warmth,—and it should be understood and admitted to be a wise and necessary expenditure, without which a hospital for the insane cannot be what it ought to be.

I would not be misunderstood; I regard a commendable economy as deserving the highest consideration, and I believe I try to prevent waste and avoid extravagance, but at the same time I maintain a hospital should be judged by what it can accomplish by a not unreasonable expenditure, by its general results, and not by the lowest scale of expenditure that will enable it to be carried on at all. If it be said we have expended something for some things we possibly could do without, for a while longer at least, I answer, it has only been done on the score of humanity, after careful consideration of what would be only a wise policy, and through the exercise of that discretion that must be in some degree conceded to a supervisory board, having in its keeping such important interests as cluster around a public institution like this. But I believe nothing has been expended in this way except what was quite necessary to supply deficiencies that ought not to exist any longer, or would in the end diminish the cost of supplies and afford increased facilities for easy administration of affairs.

In vindication of the financial management of the hospital hitherto, if any vindication is needed, it may be said that neither before the Code limited the amount that could be drawn and used in current expenses to twenty dollars a month, nor since, has that sum been drawn or expended, except during the few months while we were replacing the great loss by fire, a step of real necessity as well as wisdom, the alternatives being the discharge of patients and closing the doors of the hospital, or an extra session of the legislature. After that work was so far advanced that it could be used in part, it was not prosecuted further, and the amount drawn from the treasury was reduced to ordinary living expenses, though still a little above the present limit. This limit is, in my opinion, too low. Of course it is possible to curtail some expenditures I deem necessary, and meet your entire approval, I believe, and subsist on a less sum; it would not, however, I am sure, enable us or any one to carry on this work for much length of time and merit approval or meet public demands. Nor will the present limit of income meet some extraordinary repairs that will be needed during the next two years. These things are so well known to you, as well as some additions and improvements you have had under consideration, that I need not mention them in detail, and will only say that I hope all the means will be furnished that will be needed to promote the welfare of the patients the hospital will be called upon to take care of, and keep it in the front rank of institutions of its class.



## EXPENDITURE OF SPECIAL APPROPRIATIONS MADE BY THE SEVENTEENTH GENERAL ASSEMBLY.

The sums appropriated as specified in chapter 148, Acts of the Seventeenth General Assembly, have been mainly expended under my immediate supervision, acting by direction of your Board. The foreman, who was employed in charge of the stone masonry, while rebuilding the engine-house, was employed to complete the clock tower, and afterward to commence the work of replacing the sub-basement wall, for which a partial appropriation was made by the Sixteenth General Assembly.

The reduction of the sums appropriated by nearly sixteen hundred dollars below our estimates of what was necessary—estimates quite carefully made—together with the cost of freight which was omitted in making up the estimates, and amounted to about one thousand dollars, has caused me some embarrassment, and made it necessary to do some work in a plainer, cheaper, and less substantial manner. The work, however, will be found, on inspection, so substantial, I think, as to be pretty satisfactory, and I think will be durable.

The clock tower was not carried up so high by a few feet as designed, and as would be desirable, but it only is a little too low to be well observed from the lower story of the east wing. The new bakery and mangle-room which are located in this new engine-house building have been conveniently fitted up and furnished, the former with a fourteen feet Vale rotary oven, a dough mixer, and cracker machinery; and the latter with a Baldwin hot cylinder mangle of the largest size. All this apparatus is very satisfactory in its operation, but I fear the oven may prove a little troublesome to keep in repair, but it does most excellent work.

This engine-house building proves to be most convenient, and affords us far better facilities than I supposed it possible we ever would have till the former building burned down. If we could have built it a half story higher, and thereby provided some convenient storage room, there would be little else to be desired in its arrangements. It is fire-proof, with the exception of the floors, which are laid on concrete, and will not readily burn with rapidity, and the roof which is covered with tin and painted. The only smoke-flues in it, one from the bakery, and one from the ironing room, are so carefully constructed where they are carried up through the roof that there is no danger from that source.

This work was completed during the summer and fall of 1878, and

was a necessary prelude to the reconstruction of the rear center immediately south of the chapel, for better conveniences and protection from danger of fire.

This building, about sixty by sixty-two feet, and four stories high, including the basement, containing cooking apparatus in the basement, with employes' dining-room, store-room, sewing-room, and male and female employes' sitting-rooms on the first floor, female employes' sleeping-rooms on the second, and male employes' sleeping-rooms on the third floor, and water-tanks in the attic, had settled unevenly so that its walls were badly cracked leaving openings into smoke-flues in two or three or more places between floors and ceiling. The sleeping-rooms were large for single persons, but too small for four or five who often had to sleep in them. No provision had been made for warming or ventilating them, and they were not conducive to health. The kitchen was too low and could not be as well arranged as it ought to be. There was good reason to believe there was great danger from fire in this quarter, but in the reconstruction the real danger was found to be greater than it was supposed to be, of which charred wood found near cracks opening into smoke-flues is sufficient evidence.

Having to use this building for cooking, and in part for sleeping rooms, etc., the change has been a slow and tedious one. Some unforeseen obstacles have added somewhat to the cost, and more of the cracked interior walls had to be renewed than was expected before we entered upon the work, and none of the flooring could be raised in a condition fit to relay as I hoped for. In the work of reconstruction a stone-step stairway was set to reach the first floor from the basement, and continued in iron work to the attic. A separate stairway, also of iron, was constructed to lead to the apartments of female employes on the second story.

Throughout the building ample heating and ventilating flues have been put in, the latter extending well up through the roof. Two new smoke flues were also arranged for, as needed, in connection with partition brick walls that must be renewed. Heating coils will be set in the basement, and each one will receive its supply of fresh air through a connection made with the main fan-duct leading under the center building to the wings. The large rooms occupied by several employes in common have been divided each into three or four single rooms by partition walls built of blocks of concrete composed of plaster of paris and cinder—one part of the former to two of the latter. These par-

tion walls are six inches thick, and are only about three-fifths as heavy as brick masonry of the same dimensions; and while they occupy less space than ordinary brick walls they are not heavy enough to deflect the not very heavy iron beams on which they rest. The blocks of concrete being smooth and of uniform thickness do not require a coat of plaster, but a hard finish coat can be directly applied and leave a very good finish; or, if preferred, a thin coat of plaster mortar can be floated on the wall and then finished in the usual way. As it was not practicable to give to each sleeping room a hot-air flue, these partition walls were not carried quite up to the ceiling, which will allow an equal distribution of the heat supplied to each story through openings near the ceiling. This distribution of heat will be aided by an arrangement for ventilating each room through a perforated base board and small channel under the floor leading to larger ventilating ducts which pass up through the roof. The energy of these ducts can be increased to any desired degree if necessary by means of a steam coil in a recess made for the purpose.

Advantage was taken of the opportunity to increase the height of the basement, which will be of lasting benefit, and alone would nearly justify the cost of the whole work. This is only one of the numerous advantages, however, that will be derived from this change, and will be felt as long as the hospital shall be used for this purpose. But of far more importance than all else is the security it will give from the danger from fire at the most exposed point on the premises. And now, having so large a portion of the administrative department in so safe a condition, it would seem to me wise to put the remainder into like condition of security, and thus prevent such a complete destruction of the building as has happened in Missouri, Nebraska, Kentucky, and Ohio, within a few years.

The work is approaching completion at the date of this writing and will probably be completed with the resources that may be used for the purpose.

The appropriation for water-pipe was used to run a separate pipe from the steam pumps to the basement of the main building, with a branch to each story of the main building, and each ward, and into each attic, to which the best gum hose is kept constantly attached. The sum granted, being less than the sum estimated to be necessary, proved to be too small to procure all the hose required. If additional hose is purchased it will be practicable to have a powerful stream, or two or three streams of water playing as soon as an alarm can be given

in the boiler-room where a pressure of steam is kept up throughout the day and night. I deem it very important that this probably very efficient safeguard be rendered as complete as possible by the purchase of additional hose with the least practicable delay.

The appropriation for kitchen furniture has been expended for two new cooking ranges, one boiler, and four vegetable and soup steamers, and a few kettles, pans, etc. This sum was also smaller than we well knew was needed, and we are, therefore, obliged yet to use two large jacketed kettles that are so nearly worn out as to be almost worthless, and are only used with a large waste of steam. Means for procuring something in place of these almost useless articles must be provided soon.

The laboratory, for which an appropriation was made, is not quite completed, but probably will be some time in October. A portion of the appropriation has been used to purchase apparatus for pathological and chemical researches, and these have been used to some extent. It is found to be impossible to carry on this work as we desire to do in the business office, and we will have no other place till the laboratory can be completed.

It has been found necessary, for reasons given in the foregoing account of the improvement of the rear center—the unforeseen obstacles and imperfections encountered—to apply the contingent fund for the completion of that improvement. And, as before remarked, it will probably afford just the amount required for the purpose.

The Sixteenth General Assembly appropriated five thousand dollars for the replacement of the sub-basement wall of the hospital, after Messrs. Piquenard and Finkbine had examined the wall and reported that the work ought to be done. The estimated cost was sixteen thousand two hundred and thirty-seven dollars and fifty cents. Their report may be found on pages twelve and thirteen of the Eighth Biennial Report.

Owing to the necessity for expending so much money to rebuild the engine-house, and the lack of cash in the State treasury, it was deemed advisable to wait till a more favorable period before expending any part of that appropriation. Believing it would not be proper to wait longer before beginning the work, and it being necessary to replace the foundation of the rear center building before putting in the heavy iron beams and arching in its interior, a commencement was made in the summer of 1878. The process has been to first shove up the walls above the water-table carefully, with heavy timbers, kept at a strain by means

of jack-screws, and then take out the imperfect water-table and ashlar beneath. Before the beginning was made it was supposed the inner wall or backing of the ashlar was good enough, but this was found to a considerable extent not to be the case, and so to a large extent the entire wall has been taken out and replaced with material that is believed to be durable. Where the inner wall behind the disintegrating and riven ashlar was found to be sound and composed of large rock, occasional openings were made and heading ashlar put in to hold the new and old wall well together. The face of the work as it appears consists of a base course of twelve inch rock with a two inch wash, surmounted with three feet of broken range work, on which rests a ten inch water-table with a four inch wash. So carefully has the work been done that no new crack has been observed and no appreciable settling, except in one place where the wall has cracked badly from previous settling and slightly parted from connecting interior walls, but even at that point it is probably left in better condition, than it was before, against future settling. With the sum appropriated, between one-fourth and one-third of the sub-basement wall has been renewed. In my judgment the portion renewed is the least expensive portion of the work. The remainder will cost somewhat more proportionately, especially that portion under the circular bay windows of each wing. The remainder of the foundation is weakening rapidly, and I think a sufficient sum should be appropriated by the next legislature to complete the work. It is not probable the work will be completed for the sum estimated, but I expect the cost will not exceed the estimate by a very large sum. A foreman, at ordinary foreman's wages, was employed to superintend the work at the beginning, but I think that may not be necessary hereafter, and if not perhaps the cost will be reduced by a little.

#### ORDINARY REPAIRS AND RENEWALS.

The wear and damage and destruction about hospitals for the insane of this size, appear considerable—even unduly large, perhaps, to those practically unacquainted with its affairs—when looking at aggregated expenditures as displayed in their financial reports. And it is true the sum total is a large one, but perhaps not larger than upon reflection would appear natural or inevitable when the real character of a large proportion of the population of such an institution is taken into consideration, and yet, perhaps, not very much larger in proportion than

is necessary in the population at large. Still it is larger, probably, for many insane persons are peculiarly mischievous and destructive, while the mechanical appliances and fixtures are disproportionately larger than is necessary for the same number in the general population, and here, everything of the kind, *i. e.*, of repairs, appears as an item of expense, while many things of the same kind done by individuals elsewhere, though costing really just as much, does not so appear.

The longer the period that has elapsed from the opening of a hospital the greater, as a rule, within certain limits, will be the cost of repairs; but this outlay is not confined to this class alone, for I find in the financial report of a hospital not yet completed, for the biennial period preceding this one, there was charged for "repairs and improvements," more than four thousand seven hundred dollars, and the institution referred to has so far been constructed with far more care and at far greater expense than was the case here, having already cost twice the sum, not including land, that had been expended upon this hospital when its construction account was closed.

A large proportion of the outlay for repairs in this institution has been to remedy original defects both of construction and location, and there is more of the same kind of work to do. A few more studding partitions remain that not only call for frequent repairs, but are harbors for rats, and dangerous fire-traps. They should be replaced without delay with substantial walls, as has already been done in part, to our great comfort, advantage, and general security. When this change is made, a change in the system of ventilation from upward to downward should be made where it has not already been done, *i. e.*, so far as to receive fresh and warm air at a point above the center of the wards and rooms and discharge it at or near the floor, in accordance with principles well established long before the hospital was built, and which, in my opinion, should have been incorporated here. As it is, the fresh air flues being near the floor, and the ventilating flues near the ceiling, the warmest air in winter rushes out and the cost of heating is much enhanced, while patients with diseased pulmonary secretions, decayed teeth, and who chew tobacco, will sometimes spit in these fresh air flues rather than take a dozen steps to reach a spittoon, and thereby contaminate the air all must breathe. On the contrary, if the lower flues were discharge or ventilating flues no such disagreeable results would ensue. These alterations, I am well aware, are not to be reckoned as ordinary, or a legitimate charge to current expense ac-



count, but it is convenient to speak of it here as something needing to be done; and when it is done the annual cost of repairs will be in some degree diminished.

The roof and cornice are a source of perpetual expense. Both are of galvanized iron, and neither will hold paint well. The former had become corroded in places and leaky before paint was applied; and every year the ice which makes in the overhanging cornice gutters makes extensive breaks, allowing the water to run down both the outside and inside of the walls. The roof and cornice, all the outside wood work and the window-guards, and the barns will need painting during the next year or two. Several wards will require painting also. All the old window-guards were light, brittle, and afforded little security. Many have been broken, and these we have replaced with a more substantial and improved pattern; and more work of this kind should be done during the coming year. The floors in many parts of the building were poor in the beginning, and they have become much deteriorated by use—the hard usage that is the result of the characteristics and habits of many patients; and to a large extent the floors need renewing. Some of the material was of soft pine, which is quite unfit for hospital use. This work ought to be begun at once, for it will require some years for completion. Glass, furniture, crockery, utensils of all kinds, steam and water pipe and fittings, plastering, etc., suffer destruction, or become in one way or another unfit for use in hospitals to a degree that nowhere else obtains.

All these repairs and renewals have been kept up pretty well, though some matters of the least pressing necessity have been deferred to the future. Besides the multitude of smaller matters that have received attention from day to day, a few of the larger items of expense were the renewal of the food car track from the kitchen to the end of each wing. This track had been laid on wooden rails, and it could never be kept well in place on account of shrinking and swelling at different seasons of the year, often resulting in throwing the car from the track and the spilling of food. It had been repaired from time to time, but had at length become utterly unserviceable. Instead of renewing it with wood, stone flags were used to which the iron track is fastened, and the car runs on the new track with a steadiness and security not before attained. Of course this cost more than a wooden support for the rails, but it must be far better in the end. The market hall floor was also in a dilapidated condition, and the need of a substantial floor

in that place was imperative, and a durable stone flagging floor has been laid. The settling pond in our system of water supply had become quite filled up with deposit, and an adequate supply of water could no longer be obtained. The removal of this mud—between six and seven thousand yards—occupied several weeks; and though our own teams were employed in this work so far as they could be spared, and patients assisted in that portion of the shoveling that was not too heavy for anybody but stout laboring men, the direct outlay was not far from twelve hundred dollars.

Gradually the repair of the mud road over which we have to haul supplies—sometimes quite impassable for loaded teams—has been slowly carried on, and it is to be hoped that, in the course of two or three years, we may have a solid road-bed to the side-track, nearly opposite the Washington street gate, which the railroad company has kindly built for our use without expense to us. In making this substantial repair, a flag-stone crossing to connect the entrance gate with the sidewalk on the opposite side of the street, was constructed for the convenience of persons afoot visiting the hospital when the street is muddy and difficult to cross, as it has been much of the time at certain seasons of the year. To all the repairs and renewals I have given a good deal of personal attention, as well as to carrying on the work for which appropriations were made by the legislature; and it has been my aim, while endeavoring to do the work economically, to do it in such a way as to call for no more expenditure of the same kind for some time to come.

#### ANTICIPATED REPAIRS AND RENEWALS.

In addition to those already suggested as needed—repainting, new floors, and new window-guards—the ice-house and cold room will probably require new roofs, the main sewer at its termination rebuilt where it was washed out by high water, and at two or three points where it has been undermined by rats, the reservoir walls extensively renewed where the stone has been broken and displaced by frost, new doors in place of several that have been so injured as to be insecure, and new locks for the outside, attendants' and dining-room doors of the east wing, are those that are at this time most apparent. It is also probable that a scaffold should be built to enable an examination of the top of the smoke and ventilating stack, which was struck by lightning last summer and one of its large cap-stones thrown down.



And I would submit for your consideration the question of the propriety of attaching conducting-rods to prevent future accidents of the like kind. It should also be mentioned, that, at the point where the fresh air duct and the ventilating duct pass under the foundation-wall of the third section of the east wing is a vein of water, but a few feet below the surface, and standing water is found in these ducts during most of the year, and this should be drained off to the east. If the addition to this wing that has been proposed should be built, this needed drainage could be carried out with less expense than in any other way.

#### CONTINGENCIES.

One considerable expenditure that has contributed to swell current expenses during the past two years was the building of a new boiler. The four boilers that had been in use were never quite adequate to the work required of them ; and in the coldest weather of winter, especially if long continued or accompanied with high wind, we could not make all parts of the house comfortably warm. It is a fact that patients have suffered in consequence, and had reasonable ground of complaint. This was known to your Board and to the Visiting Committee, and was the basis of your recommendation that an additional boiler should be provided ; and not only on the ground of humanity to this household of patients, but on that of safety and the avoidance of a possible calamity. These boilers had been in use, one ten, and three nine years, and had, up to the fall of 1878, had no expensive repairs—indeed, no repairs, except what was rendered necessary by the fire of the spring of 1876. The oldest, and the cheapest one of the three, had its fire-box and lower outside sheets considerably “scaled,” and was not strong enough for effective use in extreme weather ; and if it gave out, or either of the others, as they might, even if not to any greater extent than the disablement of a single flue, in any extreme cold weather, the consequences could but be most unpleasant, and really inexcusable, as this could be avoided. Accordingly a new boiler was built in the boiler-room of the best materials and in the most approved style of workmanship, and was got into use just as one of the older boilers became quite unfit for use till it was overhauled and repaired at a cost of more than three hundred dollars. We are now equipped with a heating apparatus that, with small repairs, will do good service for a score of years to come. This expenditure is justified, it seems to me, by every consideration of the health, comfort and gen-

eral welfare of the patients in the hospital, for if they could not be provided with sufficient warmth they could not bathe as often as health required, or be supplied with pure air to breathe, all of which are necessary to maintain health in a crowded hospital for the insane.

Another item of contingent or unforeseen expenditure arose from a failure to obtain our necessary supply of ice in the winter before the last from our premises, as we had been able to do mainly for several years previously; nor was it to be procured in this vicinity. Only being able to obtain it from a great distance, and then having to haul it from the cars on a drag to the entrance gate, the mud being too deep to permit its transportation in wagons outside of our grounds, it proved to be an expensive luxury, but a necessity nevertheless.

#### WANTS.

These may be divided into two classes: those which are of immediate and rather pressing importance, and those which can be postponed to a not distant future; all of which will require an appropriation by the legislature before they can be provided for. They are all so well known to you that it would be superfluous for me to speak of them here in detail, or adduce the reasons, obvious to you, why they should be provided for—any of them that in your judgment you will report for the consideration of the legislature. I will, however, venture to say, that, while I look upon the changes in the interior before mentioned—replacement of lath and plaster partitions with masonry, and improvement of ventilation—as having an importance quite out of proportion to the probable cost, everything which is needed to maintain our water supply, hitherto somewhat precarious, is of imperative necessity. And I can hardly refrain from adding that I feel a deep interest in the further improvement of the grounds—their grading and adornment with shrubbery—and the hope that this worthy object, which the public as well as the household of patients can appreciate and enjoy, may be deemed a suitable one for a moderate expenditure each year for several years to come.

#### ENLARGEMENT OF THE HOSPITAL.

It must be well known to a large proportion of the people of the State that the present hospital accommodations are quite inadequate to the public need. With an insane population of thirteen or fourteen hundred, there is hospital room for not more than seven hundred and

fifty. Of the remaining six or seven hundred one half at least, it is safe to say, need such care as they can only have in a properly organized and well conducted institution devoted to their care. A portion of this number are already in this hospital, constituting its surplus population, and are a class deemed mainly too violent or uncontrollable to be provided for elsewhere. To the extent that they crowd this hospital beyond its true capacity, its first and highest function, cure of the curable, is any practicable degree of benefit short of cure, greatly impaired; and when the surplus, as in this case, is so largely composed of the violent, destructive, noisy, and ill-disposed our best efforts are often well-nigh frustrated. A place for the cure of the incurable can be moderately crowded with less ill result than a hospital for the cure, or curative treatment of insanity. I cannot advocate an overcrowded asylum for the incurable; but it may humanely be said that the chronic insane as a class require less room, provided it is comfortably arranged and properly ventilated, than the class of recent cases from which alone recovery can be looked for. These should have every advantage known to be conducive to recovery afforded them; or, at least should not have preventable obstacles thrown directly in their way. As before remarked, the preventable obstacles we have had to contend with that seemed most injurious in effect have been crowded wards and deficient classification. It may also be added that by reason of a sifting process carried on for years to afford more room whereby the most quiet and tractable of the uncured class have been sent away, the general characteristics of the incurable class remaining are not unfrequently an obstacle to the best management of curable patients. This, however, naturally follows as the result of the preceding condition, and is mainly only present or absent with them; and each may therefore be considered preventable obstacles. Overcrowding should not be made necessary, and abundant means for suitable classification should be provided, so that noise and fury shall not deeply shock the sensitive and timid; so that the dirty or other offensive habits of a considerable class shall not offend the refined and orderly; which will separate and classify epileptics properly and afford them the full amount of attention that will protect them as far as possible from the accidents to which they are peculiarly exposed; give the melancholy and suicidal the special care and attention they require and will conduce to their welfare; surround the insane criminals and the homicidal insane with safeguards against danger to themselves or others; afford the quiet, orderly and industrious as much freedom as possi-

ble from chafing restrictions, and protect the convalescent from every adverse influence that can possibly tend to interrupt the process of cure, a process always requiring for the attainment of the most successful results such quiet and cheerful surroundings, as well as delicacy of management and tact, as can scarcely be understood or appreciated by the unprofessional public.

The Association of Superintendents of American Hospitals for the Insane have, without dissenting voice, expressed the opinion that in a hospital for the insane receiving and treating the curable and caring for the incurable, there should be at least a ward for each fifteen patients under care. This, I am fully convinced, is a large enough number for any ward, and it would often be desirable to have wards for a less number. Applying the above rule of experience to the number of patients in the hospital, we should have thirty-two wards, whereas we have but eighteen. It is true the above proposition of the association applies to a hospital for two hundred, or two hundred and fifty patients—the least number it is worth while to build and organize a public hospital for—but the ratio will hold nearly good for any higher number it may be desirable to have under one roof. Under such a classification almost every individual indication and necessity can be met and supplied, whether medical or social, as would be desirable, remedial or in any way beneficial, as can be done in no other way. It would effectually prevent numerous annoyances many patients suffer from to their lasting detriment, inseparable from a crowded hospital, or even one not crowded that has a too limited means for classification. Situated as we are, with an average of more than twenty-six patients for each of our nine wards for each sex, and yet practically, of a necessity—in order to secure any of the benefits of any degree of classification, or the greatest benefit from our limited facilities for classification, if we would still afford the public any accommodation beyond the number the hospital is arranged to accommodate—being obliged to have the classes range in number from fifteen to forty, while some are doubtless benefited, others must suffer. Such a course is necessary for the cure of some, and for the highest welfare or the reasonable comfort of others, though it is of course doubtful if any ought to be so situated as to have to suffer that the welfare of others may be promoted. Certainly where the State undertakes to provide for any of its citizens it should so provide that one shall not be benefited at the expense or suffering of another.

Again, the wards, if few in number, are more nearly alike both in

appearance of their constructive arrangement and furnishing, and therefore the great advantage that may accrue to individuals by changes during convalescence from one to other wards, having agreeable diversities calculated to turn morbid mental action into healthier channels, is lost. This I believe no one will gainsay who has seen and understands the profound influence mental impressions may have over bodily conditions, or who has carefully watched and become familiar with the delicate and interesting processes through convalescence to recovery from mental disease. The tendency in a large proportion of cases of insanity, I believe, is to some fixed, incurable form, both in and out of hospitals, and if this tendency is not checked or counteracted in the earlier stages, the future is well-nigh hopeless. That this is so cannot excite much surprise when the delicate and complex organization and structure of the brain is considered. Remedial measures, including medication and the moral treatment and restraint in modern hospitals as arranged and conducted, can do much to counteract the tendency to brain degeneration and chronic insanity, but even those that may be termed the best arranged hospitals, are inadequate to do all that can be done with better facilities at command. Here, as elsewhere very generally, we are tied down by inexpansive architectural structure, the work of inexperience chiefly, concerned with effect and display, and heedless of scientific requirements. Consequently we are less able to afford individual patients that individual treatment often so desirable, and so effectual in the management of insanity that can be cured. With but few wards, and one ward much like another, with its inevitable corridor and rows of rooms on either side, the patient going from one to another finds little else than to live, perhaps, a rather dreary monotony of sameness that gives no relief. New faces are there of course, but little of that variety of form, furnishing, occupation, diversion, inducements for self-control, all of which are desired in some degree by the sane as well as the insane, and are not needed more by the former than the latter.

Unfortunate as many of the embodiments of existing hospitals are, and to some extent irremediable, and not worthy to be copied as a whole, they are not all bad, I would not be understood to say, and they have been a great boon to suffering humanity throughout the length and breadth of the land. But this one especially can be provided with greatly increased facilities for carrying on its work for all time to come that it shall be used for its present purpose, with a moderate

outlay for enlargement, and for alterations that experience has demonstrated to be needed, or at least very desirable. Almost every neighborhood, and numerous families, are directly interested in this matter. for almost every neighborhood and numerous families in the State have been visited with the affliction this institution was designed to alleviate.

It being therefore urgently necessary—a fact widely conceded, I believe—that further provision for the care of the insane should be provided with the least practicable delay, I urgently recommend that one of the first steps shall be the increase of our facilities for that purpose by enlarging the hospital so as to afford three additional classes and wards for each sex. Such a step is entirely practicable, and can have no other effect upon the present structure than to give it more harmonious proportions; and it will afford much needed *room* alone, without regard to other advantages aforementioned, at a less cost, and in a shorter time, probably, than room can be provided in any other way. This point is taken on the ground that no addition will be required to the present administrative department—store-rooms, kitchens, laundry, bakery, pump, engine, and boiler-rooms, etc.—nor will it increase the official staff.

This proposed enlargement of the hospital—an extension in fact of six wards now existing, but too small to be maintained separately under existing circumstances—will add one hundred and twenty or one hundred and twenty-five beds in appropriate rooms, and not only relieve our over-crowded dormitories, but do away with the necessity for pallets on the corridor floors.

I estimate this enlargement and much to be desired improvement will cost, including furnishing, heating and ventilating flues, and heating apparatus, not far from one thousand dollars for each bed. Perhaps it may be less, but as in any enlargement it would be desirable to use cut stone to maintain uniformity, the cost will not be much less than one hundred and twenty-five thousand dollars. And though this may seem a large sum, I cannot but think the future advantages that will accrue from it will fully justify the outlay.

When this important and much needed addition to our facilities for the successful treatment of the curable, and the best management of those requiring a maximum of care, and attention is completed, or while it is going on, I advocate the erection of a detached building at a convenient distance from the main building for the probably incurable of each sex who require a maximum of care and restraint, each



building to accommodate one hundred, or one hundred and fifty patients, and be presided over by an assistant physician. This plan would add but one to the official staff; and, at the least, the baking, washing, and ironing could be done without adding much if anything to our present conveniences for these purposes. Doubtless, under a proper system of this kind, the female patients could perform no inconsiderable part of the work of all kinds in their department, while the male patients could, besides doing a good deal of the same kind of work indoors, contribute largely to the work of raising vegetables for household consumption, or assist to carry on any work on the farm. This will be substantially a separate "cottage," or family system, or as near anything of the kind probably as is practicable, while securing order, system and due supervision. These structures may be as cheaply built as a plain, chaste style will allow, and yet be substantial, for the State, I suppose, cannot afford to build an unsubstantial structure for any purpose. I believe this will prove to be a better way to adequately provide for the insane needing public provision, than to build a separate and distinct institution for the chronic or incurable insane; and I doubt not, in this way, seven or eight hundred insane persons can be satisfactorily cared for at a minimum of cost.

#### INSANE CONVICTS.

In some of my previous reports I have called attention to what I can but deem a most unfortunate and unwise policy, the sending of the insane criminals from the Penitentiary of the State to this hospital. We have now received twenty-seven cases, including one re-admission, all males.

The following tabular statement shows results:

Admitted .....	27
Transferred to Hospital at Independence.....	1
Apparently recovered .....	1
Pardoned, and removed by friends.....	2
Eloped .....	5
Died .....	6
Remaining .....	12

The cause of death in two cases appeared to be the ill health and decline of chronic insanity; in three cases tuberculosis, and in one case valvular disease of the heart.

One case appeared to recover and was returned to the Penitentiary, but after a few months was re-admitted in a state of melancholia, with tubercles in his lungs, on account of which he gradually declined and died.

The five who escaped have not been heard from, unless one, as there is some reason to believe, was drowned in Skunk river. Two of these were unquestionably, in my opinion, cases of feigned insanity, and escaped shortly after admission, just as we were about to apply for their return to the Penitentiary, while a third was a case of doubtful insanity. We detected little or no intellectual or sensorial disorder, and about the only indications of insanity were general ugliness and a strong tendency to quarrelsomeness and malicious mischief, the apparent outcome of a long course of offenses against law and order, and criminal acts. We had no certainly authentic history of his antecedent life, but it is probable he had been in a reform school and in prisons in other states before he came to Iowa.

Of these remaining, five are persons of whom it may be said they are very troublesome, if not positively dangerous. Two have been maimed in conflicts they have provoked since they have been in the hospital, one is an adept in the act of making screw-drivers, false keys, and even dangerous weapons, without tools for the purpose, and all of them are necessarily under close surveillance, or seclusion, or the influence of medicines calculated to powerfully repress nervous excitability. The other seven remaining are more or less—generally a good deal—demented, and their emotional faculties, as well as the intellectual, having suffered much deterioration, they are now comparatively free from troublesome or vicious proclivities.

The wider my experience with the insane criminals or convicts, the stronger is the conviction forced upon me that under no circumstances should they be received into ordinary hospitals. In this opinion I am not alone. The cry comes up annually from a majority of the hospitals of the country, unfolding or recapitulating the ill effects of the present system of treating or caring for them in wards among patients from the population at large. Surely it would seem that general experience of this kind should be heeded and an effectual remedy provided. With a prison yet incomplete and in process of extension, it would be not difficult to provide for their proper treatment and safe keeping there. If this hospital should be enlarged so as to afford an improved classification that will add much needed facilities for the prosecution of its work so long as it may be used for its present purposes, accommodations for this class much better adapted for their care than those now existing could be provided here at a trifling additional expense. The former method, however, would seem to me to be the better one, inasmuch as insane convicts in general, present distinctive



characteristics which make them a class by themselves, calling for provisions for their safe keeping and the safety of others not required for the insane in general, or usually provided in ordinary hospitals for the insane.

#### CAUSES OF INSANITY.

The table of causes of insanity should have a deep interest for the public, if by securing it they may be avoided and mental health preserved. The matter is of sufficient importance, not only to individuals and families, but also to the State, to deserve more consideration than the proper limits of this report will permit. Want of proper attention to the subject is doubtless the source of a great deal of the insanity that exists from year to year, and may go on increasing in a ratio to cause serious reflection, not to say alarm, till some information is more widely diffused, interest in the subject increased, and sounder popular views prevail. If anything that can be said or done will diminish the frequency of insanity and its attendant suffering and consequences, or promote recovery, it surely will not be time or effort spent in vain; and though most I can say is but reproducing trite forms of speech out of the abundance that has been written, some light may possibly be thrown into quarters which, through ignorance and indifference, have been nurseries of insanity and its allied affections.

One result of an acquaintance with insanity, and a study of its supposed or alleged causes, is the impression that it is, in a large degree, a preventable disease. Upon first view this may appear a novel and not well grounded view, but the wider my study and observation in this field, the stronger is my conviction of its truth. Assuming, what is generally conceded, that a sound body—a healthy cerebral condition—will give rise to only healthy mental action, consistent with individual organization, and conceding that health *may* be the rule, and disease the exception, prevention of insanity by a wise and careful regard for the laws of health may be seen to be possible, if only those laws are known and understood. Fortunately they are not impenetrable or obscure, and are, mainly, easy of comprehension and practical application by any one who will make due inquiry, and bring to his aid a little reflection.

Living matter is exposed to the influence of numerous destructive or deteriorating agencies; the air we breathe, the food we eat, the superfluous luxuries we indulge in, the climate in which we live, may each

contain principles antagonistic to the vital forces, and singly or together conspire to their destruction. The more highly organized the condition of living matter the greater, probably, is its susceptibility to agencies that may interfere with or destroy function and vitality; and so the different organs in the animal economy are liable to take on disordered action and display disordered function from any of the crowding influences that interfere with vital processes, in proportion to the delicacy and complexity of their organization. Of all the organs or systems of organization of the body, matter exists in its most complex form in the brain and nervous system. Its relations with all the other organs are most direct and intimate; and upon the due performance of the functions of some of the other organs of the body its own integrity largely depends. Its relations to the blood-vessels, and the blood itself, are most intimate and important, and the effect of a diminished or redundant blood supply may be most momentous, while a change in its quality—diminished nutritive property, or the presence of uneliminated waste material, urea, bile, etc.—may be followed by consequences not less serious. While it supplies the nervous force that maintains functional and muscular activity, it requires in return for the due development of that force healthy function on the part of the digestive, assimilative and excretory organs. The brain, or certain portions of nervous matter, it will not be disputed, also furnishes mental activity, or gives rise to the phenomena we call mind; and its own healthy condition, as well as a healthy condition of its blood supply, and healthy action of various other organs, is as necessary for this function or property as for the performance of any other. Healthy, or disordered action of the brain, then, gives rise on the one hand to healthy, or, on the other hand, to disordered mental action—to that orderly, consecutive mental process under the control of the judgment and will which is called sanity, or the confusion and violence, exaltation and depression we call insanity. This disorder may be so slight or of such a character as to impair the physical functions in no very obvious degree, still it unquestionably exists, though we may not be able to see it, or detect it, and determine its nature by the unaided senses, or by any instrument to aid the senses. And this fact that so slight apparent disorder can give rise to such dread consequences should inculcate habitual care in the wise conduct of life and the avoidance of whatever can give rise to disorder or impairment of cerebral conditions. It is alike wonderful to think of how much the brain can do—what an amount of physical and mental force it can supply under fa-

voring conditions—of what it can endure from ill treatment and mismanagement, and still perform some of its varied functions—and how easily it will sometimes succumb to influences or causes apparently inadequate to bring about such an end. This may be accounted for in part by the difference in the quality and native constitutional organization of different individuals, for quality, constitution and organization are of as high importance and influence in considering the brain and its disorders, as is their relation to any other organ or system of the body. A good inheritance of cerebral soundness for generations has a value above rubies, but he that hath not this, let him take heed lest he fall.

The cause of insanity, as given in the table, number fifty-six for twenty-seven hundred and twenty-two cases out of a total of four thousand and fifty-three admissions. In the remaining thirteen hundred and thirty-one cases no satisfactory cause was assigned, and no very reliable history could be procured; four of the latter, however, were not regarded as insane. Unquestionably this table contains some things of little or no value, while on the other hand explanation is needed to display the really valuable and interesting facts that may be deduced from it. It must also be understood that it is based in a large degree upon the rather off-hand opinions of persons who gave to the matter too little consideration, or who were wholly unqualified to do better than seize upon some incident or manifestation of prominence at or near the invasion of insanity and assign it as the cause when in reality it was only a symptom or effect. In some instances where opportunity for inquiry has revealed a palpable error in the return a correction has been made, and the table may therefore be looked upon as having a semblance of reliability as far as it may be taken to show anything of value.

It is probable that insanity is not, except in a minority of cases, the result of a single cause. It may be so caused by some strong moral shock, and sometimes seems to be, as from fright, grief, or injury to the head, intemperence, loss of property, the puerperal condition and onanism, but even in some of these instances recorded in the table, perhaps in many, there were other conspiring or predisposing elements to favor development. More often it appears upon careful investigation that there was associated with a given cause serious ill health, or excesses of various kinds, or intemperence, or hereditary intemperance, or neuroses, so it would be more accurate to say the cause was business anxieties and hereditary predisposition, than to attribute it to

business anxieties, or heredity alone; and to these combined might be added in some cases intemperance, grief, loss of friends, etc. In truth, to ascertain the causes of insanity, or the cause in any given case, all the circumstances in connection with it, including antecedent life and ancestral inheritance must be carefully investigated; and whenever this is done cause therefor will always appear.

Of all the tabulated causes, those that are of the least value as a single or an associate cause are, in my opinion, religious excitement, disordered menstruation, and uterine disease. As numerical causes their potency is supposed to be in the order in which they are named. While I would not deny them influence as causative agents, I believe it has been greatly overestimated. It is not often, I think, that a person in good health, not over-worked, and possessing a fair education, is crazed by religious excitement, but persons with depressed or exhausted physical forces, weak minds, or possessed of an unfortunate hereditary proclivity to excitement or "nervousness," sometimes are; and it would be wise for such persons to always avoid sensational preaching, revival and protracted meetings, as well as other sources and scenes of excitement. Almost every year we receive three or four or more from this cause that probably would have escaped if they had been a little more prudent, or more fortunately constituted.

Disorders of menstruation, and organic diseases of the uterus are popularly supposed to have much more significance as causes of insanity than they appear to have as reported in our table of causes. I suspect the profession share in this popular belief, and have even done much to create and support it. Experience leads me to the conclusion that the popular belief is not borne out by facts. I am not willing to say I have ever met a case of insanity which was the direct sole result of disordered or suppressed menstruation. Cases have frequently occurred, however, in which a train of symptoms more or less intimately connected with, perhaps immediately following, some of these conditions were the first steps of a process that at length becoming associated with other disordered conditions has ended in insanity. But the associated symptoms when duly analyzed have usually been found to appear to be the most influential, without which insanity would not have appeared. Like any other morbid or abnormal condition of function, disorders of menstruation may end in almost any considerable disturbance of the health, not so directly, perhaps, as through an association of symptoms of other disordered conditions.

how neglected we may not exactly know. As a direct cause of insanity they are not, apparently, as influential as many others.

Uterine disease, by which is probably meant by those who use the term a wide variety of abnormal conditions, including displacements, appear to be by the table only a little more than half as influential as the disordered conditions considered in the preceding paragraph to give rise to insanity. This tabular statement is mainly based upon the popular and professional judgment, though it does not quite accord, I think, with the popular and professional view. As before stated the disorders of this organ, which are common enough and serious enough if we adopt certain professional views unquestioned, do not seem to directly cause much insanity. If, accepting the alleged frequency and serious nature of these affections, they had any such effect, insanity would surely be much more frequent among women than it is. Insanity as a reflex expression of uterine disease, not infrequently spoken of, I am not certain I have ever seen; and as long as I see cases alleged to be caused by disorders of this organ, with only a partial group of symptoms having any relation to it, without any such uniformity in the group of symptoms as to distinguish such insanity from other well recognized and described forms, I can but doubt its special value as a factor among causative agencies. The highest and widest influence of this organ, in any relation to the mind in health or disease, is, it seems to me, its effect upon or influence over the emotional faculties. In its gravid condition this influence is most apparent; while at the most, during its disordered conditions, it is far less apparent, and in ordinary health any such influence—nor any other influence over the mind—can scarcely be recognized. To the extent that its disordered conditions may affect or reduce health in general they may indirectly affect the mind unfavorably, and so cause obvious mental derangement; but the point I would make, which I think is borne out by experience, is, that the uterus bears no such relation to the nervous system, as is sometimes assumed or believed, as to give it prominence among agents causing insanity. That this may be so would seem to be a wise provision of nature, in order that its great function may be duly performed with the least danger of inflicting deteriorating nervous conditions upon the race. By anything I have said upon this subject I would not be understood as undervaluing the importance of any disorders to which this organ may be subject, for they may, any or all of them, lead to serious results, and it is as unwise to neglect their

proper treatment as to neglect any other disorder to which the human body is liable.

Of the fifty-six causes given, to only twenty-eight, just one-half, are twenty or more cases assigned; to thirteen causes are assigned fifty cases and upwards, while only eight causes have given rise to one hundred or more cases.

To business anxieties as cause of forty-one cases, we may very properly add: loss of property, thirty-two cases, and pecuniary anxiety, forty-one cases; to disappointed affections, forty cases, other disappointments, twenty-two cases; to injury of the head, sixty-five cases, fright, twenty-four cases, and sun-stroke, twenty-nine cases, for these latter cases have many characteristics in common, and the action of these causes appears to be alike largely in the nature of shock or concussion; to domestic trouble, one hundred and forty-six cases; ill treatment, twenty-three cases; to grief, loss of friends, seventy cases; poverty, hardship, etc., twenty-five cases; and to connected with ill health, two hundred and seventy cases; loss of health in military service, twenty-nine cases; change of life, thirty-seven cases; typhoid fever, twenty-seven cases; uterine disorders including disordered menstruation, one hundred and forty cases; and then the table will stand thus:

LEADING CAUSES OF INSANITY.	Males.	Females.	Total.
Business anxieties.....	96	18	114
Connected with general ill health.....	163	340	503
Disappointments.....	27	35	62
Domestic trouble.....	51	118	169
Grief, loss of friends, etc.....	21	74	95
Injuries of the head.....	103	18	121
Over exertion and excessive study.....	80	28	108
Constitutional.....	53	44	97
Epilepsy.....	206	84	290
Heredity.....	83	86	169
Intemperance.....	196	23	219
Masturbation.....	216	6	222
Puerperal condition.....	.....	237	237
Religious excitement .....	75	55	130
Total of all.....	1,370	1,166	2,536

Here, then, we have twenty-five hundred and thirty-six cases out of a total of twenty-seven hundred and twenty-two in which the supposed causes were given, that may be tabulated under fourteen heads or classes of supposed or assumed causes, and which I would desig-



nate as leading or principal causes, in distinction to others which may be called minor or occasional causes. The number might be further reduced or modified with propriety, for unquestionably some of the cases described to sundry causes did not display symptoms of insanity till, through indifference, neglect; or carelessness, some degree or form of ill health or invalidism had become strongly marked, and even fixed in the constitution.

It is to be noticed that ill health stands first among the causes. It seems to be an important fact that it stands first, or among the first in point of numbers, in the reports from every hospital for the insane in the country, which tells a significant tale of imprudence, ignorance, and consequent neglect.

Prominent among the causes of the ill health, that is so often the forerunner of insanity, as indicated by the detailed histories sometimes obtained, may be mentioned the unremitting toil, especially in the agricultural class, sometimes from an undue ambition to acquire property or wealth; sometimes from inconsiderately incurring obligations circumstances render it difficult to discharge; sometimes from the thriftlessness attending the disadvantages springing from poverty and its depressing concomitants; and sometimes from the unforeseen or unprovided-for exigencies that seem to be inseparable from every pursuit. This seems to be more true of men than women, but they have the counterpart of this in the never-ending household labors and cares, to which may be added frequently recurring maternity, each recurrence a shock, perhaps, leaving a more or less indelible impression behind. If to these be superadded, as is not unfrequently the case, business anxieties and losses, disappointments, griefs, functional disorder of some organ, it is plain there is sufficient cause for disordered health in general, that proceeding unchecked may easily involve the nervous system and disorder the mind. No less injurious are the erroneous modes of living that are met with on every hand—erroneous and imperfect methods of preparing food, diet unsuited to individual conditions, the intemperate use of alcoholic liquors and tobacco, ill ventilated apartments, etc. It cannot be doubted that cookery in general is most imperfectly performed, and furnishes a large proportion of food ill suited for digestion, which in turn gives rise to conditions unfavorable for digestion and nutrition. In health the digestion of proper food proceeds unconsciously to the individual, and the process affords just the quality required for the due nutrition of the system and the reparation of the waste continually going on. When this process is

interfered with, all the vital processes suffer, disordered function arises, elimination is weak, deleterious matter is retained in the system, and the foundation is laid for almost any disorder, especially those of the nervous system, which is often the first to suffer from ill nutrition or an abnormal condition of the blood. Alcohol and tobacco play an important part in the derangement of digestion and function that precede or accompany so much of the ill health, temporary or protracted, whether it cause insanity or not, that is abroad in the community at large. I do not think the numerical strength given them in the table of causes is a tithe of the injurious influence they exert. Most certainly is this the case, in my opinion, with respect to tobacco. Both operate injuriously, first as an associate or predisposing cause, and secondly to create a condition to be transmitted to offspring and favor the development of nervous or some other disease in them. The diffusible stimulant effect of the former is more obvious, but any effect it may have is scarcely more injurious than the slow, steady, imbibition of a narcotic poison by the habitual chewers and excessive smokers that, in its concentrated state, may be followed by a deadly effect. I know it is common enough for the users of these articles to say, "I have used one or the other, as the case may be, for so many years, and I don't perceive any injurious effect upon myself." Still, if he does not, I believe it could be pointed out to him in a convincing way if he would be convinced; and convincing proof enough can be found in this, and perhaps every other hospital for the insane. The conclusion I have reached after many years' observation is, that both alcohol and tobacco impair the health, may directly cause insanity, give rise to a condition that may be transmitted as a faulty inheritance and organization, and, if they do not give rise to unquestionable disease tend to debilitate the mind and shorten life.

Hereditary influence is probably more important as a predisposing and exciting cause of insanity than appears to be the case in the tables. It is there only the assumed cause where there was known to be strongly marked hereditary inheritance of a tendency to insanity, without the presence of other cause or causes seemingly sufficient of themselves to give rise to insanity, where without the presence of the hereditary element mental health would probably have been preserved. In numerous other cases it has been an element that seemed to play a less prominent part, and yet perhaps been the one agent that caused disease. By hereditary predisposition or hereditary agency I do not mean alone the presence of insanity in parental ancestry, any other



nervous disease, epilepsy, chorea, etc., may be as potent to vitiate the constitution; and intemperence and all the vices, though working secretly and insidiously, are all powerful to set up conditions that shall be transmitted as nervous and mental defects. Such an inheritance is truly a fearful possession, the possible consequences of which it may not be possible to avoid, but which every one so unfortunately constituted ought to know will require the greatest care and the most correct living if these consequences are to be successfully avoided. Apparently this is a cause of insanity that is operating with increasing frequency. No care appears to be taken to avoid such results, and year after year persons, who, not only inherit a tendency to insanity or some nervous disorder, but have themselves been insane, are contracting unions and becoming parents only to add to existing suffering, poverty, and the burdens of society.

The other leading causes afford themes for profitable discourse and occasion may be taken in the future to consider them, and I would only further remark here that insanity is often but an evidence of a disregard or violation of the plainest rules of right living, and may to a large extent be avoided.

#### ADMISSIONS AND RECOVERIES.

The four thousand and fifty-three admissions that are recorded by number represent only three thousand five hundred and seventy-five persons. Three hundred and seventy-nine of these persons have been admitted from two to ten times. A large majority, three hundred and sixteen, have been admitted only twice; only one person has been admitted more than five times.

Excluding all readmissions from tabular computation the movement of population would be shown in the following table:

	Males.	Females.	Total.
Admitted.....	2,016	1,559	3,575
Discharged, recovered.....	618	518	1,136
Discharged, improved.....	273	228	501
Discharged, not improved.....	418	345	764
Died.....	463	296	759
Not insane....	4	.....	4
Total discharged.....	1,776	1,387	3,163

The principal interest in the foregoing springs from experience going to show the liability to a recurrence of an attack of insanity in those who have been once insane. It is but an approximative result at best,

for doubtless some of those not readmitted have been subsequently in some other hospital, and probably some others have been in other hospitals before admitted to this one. I think, however, it is so nearly approximative as to be worth something. It is no more to be considered discouraging that a person who has been insane and recovers, heedlessly subjecting himself to the influence of the same or similar causes becomes again insane, or used as evidence against the curability of insanity in general, any more than the fact that a person who has recovered from rheumatism has a second attack from exposure to cold and wet is evidence against the curability of that disorder. Permanent recovery from any disease, or the preservation of health, depends chiefly upon the care individuals take to avoid the causes and sources of disease. It is probable that a person who has been insane is more susceptible ever after, however perfect recovery may appear to be, to any of the influences that may give rise to disordered action in the nervous system, and all such persons cannot be too cautious or too watchful. One fact in connection with the recurrence of insanity in those who have been here that seems to be of special importance, is, that in many cases it has occurred in persons who, through restlessness on their part, or impatience on the part of friends, were prematurely removed while convalescence was proceeding favorably, and before a sufficient degree of soundness had been attained to withstand the influence that had operated to cause a first attack. In other cases a like premature removal has checked convalescence and prevented recovery. It cannot with certainty be told, I suppose, just how long it may be wise and best for any certain person recovering from insanity to remain in the hospital, but it is safe to say they should remain as long as any progressive improvement is apparent, and I feel sure if this course were followed there would be fewer recurring attacks, and after two or three generations fewer cases proportionately to be attributed to hereditary predisposition.

The total of recoveries has been raised by the number of one hundred and seventy-three, by adding apparent recoveries from second and third attacks. Much care has been exercised to not swell the number of recoveries unduly; indeed to such an extent has this been carried that no inconsiderable number of those reported much improved we have subsequently learned were regarded by their friends as recovered, a majority of whom have continued to do well for years. On the other hand it is only fair to say that a few cases reported as recovered have not subsequently proved to be as mentally sound as

they were presumed to be. While we would always wish to place on record for individual satisfaction all the benefit any individual might derive from residence in the hospital, neither overestimating nor underestimating results, I believe, while without reliable statistics upon which to base a positive opinion, we have erred less often in the former than in the latter way.

A glance at the percentage of recovery, after various duration of insanity before admission to the hospital, shows the important and instructive fact that recovery from insanity bears a direct ratio to its duration. The largest percentage of recovery is obtained in those cases reaching the hospital within a month after insanity has made its appearance; while there is a steadily diminishing ratio till after a period of two years has elapsed, when the prospect of recovery is very small indeed. And four-fifths of the patients remaining in the hospital are of the class who had no special treatment or management till at least a year or two had elapsed, many of whom, so far as we may conclude from such history as we could obtain, had as fair prospect of recovery at the beginning as others. And it is not too much to say that, excluding from their number cases of epilepsy and paralytic disorder, as fair a proportion would have recovered as of those who came to the hospital earlier, instead of drifting into hopeless chronic insanity or dementia, as they have done, if only a different course had been taken. It is this class who largely cause the heavy burden of support, as it is called, and not so much those who resort to the hospital earlier and get well, a fact that seems to be of almost sufficient importance upon which to base some compulsory legislation.

The percentage of recovery in the most recent cases, fair as it is, would be increased by a considerable sum, I am convinced, if still more patience and perseverance were exercised in these cases. For some reason not certainly explained we see more capricious and unreasonable meddling, and more frequent removals before already foreshadowed results are reached, than in those cases where there has been such delay that recovery is only possible and scarcely probable. It is now so well established that insanity can be more successfully treated, and at the least cost, by a prompt removal from the surroundings in which the disorder arose, and many things which may have had much to do with its development, to any well regulated hospital liberally supplied with the well known useful and needful appliances that afford moral and hygienic management as well as suitable medical treatment, that the frequent delay in every quarter is well-nigh unaccountable. But

when the patient is once in the hospital and doing reasonably well, it is almost as unaccountable that reasonably well is not let alone till its best results can be obtained. However, it seems the signs of the times are a little more hopeful, and perhaps growing still more so, and I think we see more prompt resort to the hospital and more patient perseverance than we did six or seven years ago.

For the information of those interested enough in the hospital to wish to know something of its life and usages and are not familiar with what has already been published, I insert a few paragraphs from my last report respecting

#### HOSPITAL LIFE, AMUSEMENTS, ETC.

Hospital life is not that almost solitary, monotonous, dreary, or cheerless state or stage it has sometimes been pictured. If it has its dark and suffering shadows, as what severe illness has not, it has its shades of lighter hue also, and its periods of real enjoyment. Temper and temperaments of different individuals differ widely, and persons differ in their estimates of their personal experience here and in other hospitals, I suppose, as they differ in their temper and temperaments, or their estimates of anything else. The optimist and the pessimist are here found side by side, and neither, as usual, is quite right. While some stay with us cheerfully and willingly—even sometimes desiring to stay even longer than we feel it quite necessary to do, and thankfully acknowledge the benefit they have derived and the kindness they have received—others, with no more occasion for complaint, are dissatisfied with everything and grateful for nothing, and are chiefly occupied with schemes for obtaining their release or return home. And unfortunately they sometimes promulgate the grossest misrepresentations and misconceptions for solid truths. But for all those who will there is a way for much enjoyment. In the summer the men who are capable and willing, have opportunity for light work on the farm and in the garden, or about the administrative department; and the women have opportunities for doing some work in the sewing or ironing-room or in the kitchen. All classes are encouraged to assist in the general work of the wards. Some thus work in the forenoon and some in the afternoon; some on one day, and some on another. A large number engage more or less every week in croquet, or other out-door amusements. All the holidays and notable days of the year are observed in some special way for the interests of patients, and

to enable us to do so the public are excluded on these days. Walking parties of both sexes are abroad every pleasant day, and when it is unpleasant or inclement abroad, large numbers visit the green-house, to enjoy the exotic, tropical, and rare foliage and bloom always to be found there. During the winter evenings, or the long evenings from October to May, five or six each week are occupied with social gatherings or assemblies of some kind. On Monday, a social party of patients and their attendants in the officers' parlors; Tuesday and Friday evenings are devoted to exhibitions with the magic-lantern, and an explanatory lecture of views from most parts of the civilized world, of which we have a very good collection; Wednesday evening is occupied with a social dance, which amusement is kept up most of the year round. On Thursday evening is a meeting of the debating society, varied sometimes by music, recitations of poetry, or humorous prose, and sometimes by dramatic entertainments. This is also kept up during most of the year, and its success as a source of interest and amusement, it is proper to say, is largely due to the efforts of the assistant physicians.

The hospital library continues to be a source of unfailing interest to the large number who have a taste for reading. From this rapid sketch it may be seen that there may be some pleasant variety in hospital life, and that it may be made, and is made by many persons, highly useful to themselves.

Religious services in the chapel on Sunday afternoons have been regularly conducted by the chaplain during the period, with one or two exceptions. The chaplain continues to give the same satisfaction, and to manifest the same interest in his work as in the past. The services are attended often by nearly one-half of the household. A good choir is maintained by the officers and attendants, occasionally assisted by some patients, and the services are much enjoyed by all.

#### FARM AND GARDEN.

The products of both the farm and the garden, as will be seen from the appended statement, have given fair returns for the labor expended. These statements are for the years 1877 and 1878. At the date of this writing the crop of 1879 is not fully gathered, measured, and estimated, but it will be at least equal to the average of the two previous years. The potato crop is an exception, however, on account of the unusual drouth of the past summer.

The real worth of the garden products to us are greater than their estimated market value. If we had to buy them they would certainly not cost less, and their quality would not be as good, while to do without them would reduce diet to a very scanty variety. A good deal of the manual labor of putting in, tending, and gathering the crops has been performed by patients, and it has been both pleasurable and profitable to them. Besides the crops, the farm has afforded a good supply of milk—not at all seasons quite all we desired—but yet a reasonably good supply, and this is an indispensable article of use.

#### ACKNOWLEDGMENTS, ETC.

I gratefully acknowledge on behalf of the patients, to whom they have possessed a peculiar interest, the receipt of the following newspapers, which have been gratuitously furnished during the whole or some portion of the biennial period: Muscatine Weekly Journal; The Standard, Chicago; Dubuque National Demokrat (German); Friends' Review, Philadelphia; Vinton Eagle; Ottumwa Democrat; De Witt Observer; Glenwood Opinion; Gate City; Chariton Patriot; Ft. Madison Plain Dealer; Iowa Tribune (German); State Press; Henry County Press; Mt. Pleasant Journal; Marysville Union; Davenport Demokrat (German); Van Buren Democrat; Monona Gazette; Lucas County Republican.

Hon. S. J. Kirkwood sent a large collection of choice and rare plants. Chas. F. Blake, Esq., presented to the library a history of Wapello county, and Hon. M. L. Edwards a history of Henry county. Mrs. Throop has added to former gifts of plants for the green-house, and Mrs. L. M. Baker has given two pictures.

From time to time the patients have enjoyed the rare pleasure of listening to the delightful singing of Miss Alice Clark and Miss Sadie Turner, assisted by Miss Belle Chalfant, Mrs. Ella Dinwiddie, and Mrs. Mary Smith, and they could hardly have more enjoyable entertainments provided for them than these have been.

Geo. Josselyn, Esq., furnished the plans for the reconstruction of the rear center building, for a very reasonable charge, and some of his original suggestions were embodied in the work.

Mr. T. Mount, Mr. John Thomas, and Mr. Patrick O'Connell continue to render trustworthy and efficient service as carpenter, engineer, and fireman, respectively, and it is proper to mention favorably in this connection Mr. Jacob McCoy, who has butchered, cut and carved all the meat for nearly fourteen years.



Miss Mena Thrope, and Mr. Joseph Sutton, as supervisors, are untiring in their efforts to secure the welfare and well-being of patients.

Mrs. M. A. Blower, after nearly twelve years most faithful and valuable service in charge of the sewing-room, was obliged to relinquish work on account of failing health, and I believe she took with her, on leaving, the heartfelt sympathy of all. Miss Annie Blower has succeeded to the vacant place, and proves well qualified for the work.

Mrs. Mary Coddington in immediate charge of the kitchen, secures the cooking and distribution of food in so satisfactory a manner as to disarm complaint.

Ironing for the whole household is in charge of Miss Lizzie Snyder, and is done with neatness and dispatch, and she is to be commended for efforts to make it pleasant as well as profitable for patients to assist in this work.

Mr. Fred. Ackerman faithfully superintends the bakery, and the quality of bread furnished is hardly surpassed.

Mr. John Hall gives universal satisfaction in the not irresponsible place of charge of the washing.

Mr. Thos. F. Kellabar, dispensary clerk, left early in the period to graduate in medicine and enter upon the general practice of his profession, and was succeeded by Mr. L. H. Munn, who was unusually qualified as a pharmacist, who in turn has left to graduate in medicine, and has been succeeded by Mr. W. A. Ebbert, after rendering similar service in another hospital.

Dr. Michael Riordan, and Dr. Jennie McCowen resigned their positions as assistant physicians, the former to enter upon general practice, and the latter on account of poor health, and they have been succeeded by Dr. Morris S. Guth and Dr. Eliza B. Phelps, both of whom came well recommended, and are professionally qualified for their work. Mr. J. W. Williams, after three years service as an attendant and five years service as clerk and accountant, in both of which situations his attention to his work was most exemplary, resigned early this year on account of failing health. Mr. George McDonald has been assigned to do this same work, and has shown that he is fully competent.

Dr. Bassett has entered upon his fifteenth year of faithful service in the hospital, and I continue to be indebted to him for much of whatever success attends my administration.

To the attendants and all employes, with few exceptions, the public are indebted for much self-sacrificing and philanthropic labor in this field, and I cheerfully acknowledge the high value I can but place upon

the conscientious service they have rendered which has strongly tended to lighten the sense of responsibility I constantly feel.

To you, also, members of the Board, I must feel lasting obligations for your friendly counsel, and the support that springs from your visits of inspection, both at the stated meetings, and the monthly visits which are not announced.

Invoking such guiding light as we may have reason to expect from an overruling Providence, and hoping that I may profit by the experience of the past, I enter trustingly upon the work of another biennial period.

MARK RANNEY.

*Iowa Hospital for the Insane, at Mt. Pleasant, Iowa, October 1, 1879.*



STATISTICAL TABLES.

TABLE I.

MOVEMENT OF THE POPULATION.

	Males.	Females.	Total.
Number at the beginning of the period .....	318	290	608
Admitted in the period .....	286	188	469
Total present in the period .....	604	478	1077
Discharged—Recovered.....	96	73	169
Improved .....	35	31	66
Stationary .....	156	112	268
Died .....	49	42	91
Not insane.....	1	.....	1
Discharged in the period .....	337	258	595
Remaining at the end of the period.....	267	215	482
Average present during the period.....	282.02	243.52	525.54

TABLE II.

ADMISSIONS AND DISCHARGES FROM THE BEGINNING OF THE HOSPITAL.

	Males.	Females.	Total.
Admitted.....	2271	1782	4053
Discharged—Recovered.....	724	585	1309
Improved .....	311	260	571
Stationary .....	472	384	856
Died .....	498	338	831
Not insane .....	4	.....	4
Total number discharged .....	2004	1567	3571

TABLE III.

NUMBER AT EACH AGE WHEN ADMITTED IN THE PERIOD.

AGE.	WHEN ADMITTED.			WHEN ATTACKED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15.....	1	2	3	8	3	11
15 to 20 .....	21	10	31	24	12	36
20 to 25 .....	45	21	66	38	20	58
25 to 30 .....	33	35	68	24	37	61
30 to 35 .....	40	24	64	32	27	59
35 to 40 .....	30	26	56	21	19	40
40 to 45 .....	26	23	49	16	22	38
45 to 50 .....	30	16	46	23	12	35
50 to 60 .....	31	15	46	14	11	25
60 to 70 .....	20	5	25	14	8	17
70 to 80 .....	5	3	8	3	1	4
80 and over .....	1	1	2	1	.....	1
Unknown .....	3	2	5	68	16	84
Total.....	286	183	469	286	183	469

TABLE IV.

NUMBER AT EACH AGE FROM THE BEGINNING OF THE HOSPITAL.

AGE.	WHEN ADMITTED.			WHEN ATTACKED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15.....	28	17	45	111	63	174
15 to 20 .....	166	130	296	223	198	421
20 to 25 .....	385	263	648	346	286	632
25 to 30 .....	311	297	608	276	296	572
30 to 35 .....	288	278	564	238	253	491
35 to 40 .....	279	223	502	191	168	359
40 to 45 .....	202	176	378	137	116	253
45 to 50 .....	174	139	313	109	92	201
50 to 60 .....	234	155	389	151	87	238
60 to 70 .....	109	49	158	61	20	81
70 to 80 .....	31	16	47	17	7	24
80 and over .....	7	1	8	2	.....	2
Not insane.....	.....	.....	.....	4	.....	4
Unknown.....	59	38	97	405	196	601
Total.....	2271	1782	4053	2271	1782	4053

TABLE V.

NATIVITY OF PATIENTS ADMITTED.

NATIVITY.	WITHIN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Maine .....	2	1	3	23	15	38
New Hampshire.....	2	1	3	10	9	19
Vermont .....	2	1	3	22	20	42
Massachusetts .....	2	...	2	32	19	51
Rhode Island.....	...	...	...	...	6	6
Connecticut.....	...	...	...	14	9	23
New York.....	14	10	24	160	129	289
New Jersey.....	2	1	3	15	7	22
Pennsylvania .....	15	21	36	187	134	321
Delaware .....	...	...	...	1	2	3
Maryland .....	4	1	5	23	10	33
Virginia .....	5	5	10	57	42	99
North Carolina .....	1	...	1	17	9	26
South Carolina.....	...	...	...	4	5	9
Georgia.....	...	...	...	2	1	3
Alabama .....	1	...	1	2	1	3
Mississippi .....	...	...	...	...	1	1
Louisiana.....	...	...	...	2	1	3
Ohio .....	41	28	69	376	327	703
Indiana .....	24	15	39	171	141	312
Illinois .....	9	14	23	74	97	171
Kentucky .....	6	2	8	58	36	94
Tennessee .....	3	1	4	23	21	44
Missouri .....	6	1	7	39	20	59
Michigan .....	4	...	4	12	6	18
Wisconsin .....	3	1	4	10	9	19
Iowa .....	45	34	79	220	170	390
Minnesota.....	...	...	...	1	...	1
Nebraska .....	1	...	1	1	...	1
Kansas .....	...	...	...	...	1	1
California .....	2	1	3	3	1	4
District of Columbia.....	...	...	...	...	2	2
New Mexico.....	...	...	...	1	...	1
Canada .....	5	3	8	30	15	45
Nova Scotia.....	1	1	2	2	5	7
New Brunswick .....	...	...	...	1	...	1
Great Britain .....	28	12	40	262	185	447
Germany .....	26	19	45	192	179	371
Austria.....	...	1	1	4	2	6
Prussia .....	4	1	5	16	15	31
Holland.....	1	1	2	6	5	11
Denmark .....	2	...	2	9	3	12
Norway .....	2	1	3	25	16	41
Sweden .....	9	2	11	48	22	70
France .....	2	...	2	14	6	20
Portugal .....	...	...	...	1	...	1
Belgium .....	...	...	...	2	...	2
Switzerland.....	2	1	3	19	14	33
Netherlands.....	1	...	1	6	1	7
Bohemia.....	6	1	7	15	14	29
New South Wales .....	...	...	...	1	...	1
Unknown .....	3	2	5	58	49	107
Total.....	286	183	469	2271	1782	4053

TABLE VI.

## RESIDENCE OF PATIENTS ADMITTED.

RESIDENCE—COUNTY.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
State at Large .....	46	7	53	220	56	276
Adair .....	8	1	9	12	6	18
Adams .....		3	3	7	9	16
Allamakee .....				13	20	33
Appanoose .....	5	5	10	33	24	57
Audubon .....	2		2	3	3	6
Benton .....				17	19	36
Black Hawk .....				14	13	27
Boone .....				12	12	24
Bremer .....				10	11	21
Buchanan .....				7	5	12
Buena Vista .....				1		1
Butler .....				4	5	9
Calhoun .....				1		1
Carroll .....				7	2	9
Cass .....	2	1	3	7	9	16
Cedar ..	4	7	11	27	39	66
Cerro Gordo .....				5		5
Cherokee .....				2	1	3
Chickasaw .....				8	7	15
Clarke .....	7	2	9	18	6	24
Clay .....				3	1	4
Clayton .....				27	17	44
Clinton .....	1		1	49	44	93
Crawford .....				10	5	15
Dallas .....	5	4	9	24	9	33
Davis .....	6		6	40	23	63
Decatur .....	6	5	11	26	22	48
Delaware .....				13	7	20
Des Moines .....	12	15	27	84	90	174
Dickinson ..				2	1	3
Dubuque .....				47	53	100
Emmet .....				2	1	3
Fayette .....				16	14	30
Floyd .....				6	5	11
Franklin .....				2	4	6
Fremont .....	1	3	4	10	15	25
Greene .....	1	1	2	8	13	21
Grundy .....					2	2
Guthrie .....	1	1	2	11	9	20
Hamilton .....				1	5	6
Hardin .....				7	9	16
Harrison .....	6	2	8	18	19	37
Henry .....	11	11	22	69	61	130
Howard ..				1	6	7
Humboldt .....				2		2
Iowa .....	6	3	9	32	28	60
Jackson .....				21	19	40

TABLE VI—CONTINUED.

RESIDENCE—COUNTY.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Jasper .....	9	5	14	52	45	97
Jefferson .....	9	9	18	57	52	109
Johnson .....	15	6	21	62	27	89
Jones .....	.....	.....	.....	13	24	37
Keokuk .....	6	7	13	51	41	92
Kossuth .....	.....	.....	.....	.....	1	1
Lee .....	8	6	14	108	103	211
Linn .....	.....	.....	.....	29	28	57
Louisa .....	3	3	6	33	27	60
Lucas .....	5	3	8	21	12	33
Lyon .....	.....	.....	.....	.....	1	1
Madison .....	6	3	9	36	21	57
Mahaska .....	8	5	13	43	37	80
Marion .....	6	1	7	67	35	102
Marshall .....	.....	1	1	26	17	43
Mills .....	3	2	5	30	13	43
Mitchell .....	.....	.....	.....	2	1	3
Monona .....	1	.....	1	7	7	14
Monroe .....	4	2	6	37	16	53
Montgomery .....	4	1	5	20	8	28
Muscatine .....	8	7	15	44	36	80
O'Brien .....	.....	.....	.....	.....	1	1
Page .....	1	1	2	20	11	31
Palo Alto .....	.....	.....	.....	.....	2	2
Pocahontas .....	.....	.....	.....	2	3	5
Polk .....	7	9	16	61	67	128
Pottawattamie .....	10	6	16	38	32	70
Poweshiek .....	3	2	5	15	26	41
Ringgold .....	.....	2	2	6	7	13
Scott .....	5	5	10	51	73	124
Shelby .....	1	.....	1	8	2	10
Story .....	.....	.....	.....	7	7	14
Tama .....	.....	.....	.....	11	6	17
Taylor .....	3	3	6	15	13	28
Union .....	1	.....	1	7	7	14
Van Buren .....	5	4	9	53	51	104
Wapello .....	13	6	19	58	47	105
Warren .....	6	5	11	35	20	55
Washington .....	5	4	9	64	40	104
Wayne .....	1	4	5	12	13	25
Webster .....	.....	.....	.....	5	5	10
Winnebago .....	.....	.....	.....	.....	1	1
Winneshiek .....	.....	.....	.....	20	12	32
Woodbury .....	.....	.....	.....	6	3	9
Worth .....	.....	.....	.....	5	.....	5
Wright .....	.....	.....	.....	2	.....	2
From elsewhere .....	.....	.....	.....	73	52	125
Total .....	286	183	469	2271	1782	4053

TABLE VII.

## OCCUPATION OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Agents .....	1		1	15	1	16
Apothecaries.....				1		1
Artists.....				2		2
Attorneys .....				3		3
Bakers.....	2		2	4		4
Bankers .....				1		1
Barbers .....	2		2	5		5
Basket-makers .....				1		1
Blacksmiths .....	2		2	25		25
Book-binders .....	1		1	1		1
Book-keepers .....	1		1	1		1
Brewers .....	1		1	2		2
Bridge-builders .....				1		1
Broom-makers .....	1		1	2		2
Butchers .....	1		1	5		5
Cabinet-makers .....	1		1	7		7
Carpenters .....	8		8	47		47
Cashiers .....	1		1	1		1
Chair-makers .....				1		1
Cigar-makers .....				1		1
Clerks .....	2		2	33		33
Colliers .....				4		4
Confectioners .....				2		2
Coopers .....				4		4
Dentists .....	1		1	2		2
Domestic duties.....		162	162		1546	1546
Druggists.....				2		2
Editors .....				1		1
Engineers.....				3		3
Engravers .....				1		1
Farmers .....	143		143	1059		1059
Gardeners .....	2		2	7		7
Grain dealers .....				1		1
Grocers .....	1		1	5		5
Gunsmiths.....				2		2
Harness-makers.....				5		5
Hat-braiders .....					2	2
Hotel-keepers .....				7		7
Hunters .....				2		2
Iron moulders .....				2		2

## TALBE VII—CONTINUED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Jewelers .....	..	..	..	2	..	2
Laborers .....	48	..	48	442	..	442
Laundresses .....	..	..	..	..	1	1
Lawyers .....	..	..	..	7	..	7
Machinists .....	..	..	..	6	..	6
Masons .....	3	..	3	20	..	20
Mechanics .....	..	..	..	1	..	1
Merchants .....	4	..	4	30	..	30
Millers... ..	..	..	..	4	..	4
Milliners .....	..	..	..	..	8	8
Millwrights .....	..	..	..	5	..	5
Miners .....	4	..	4	16	..	16
Musicians .....	..	..	..	3	..	3
No occupation .....	28	12	40	233	134	367
Not ascertained .....	2	..	2	46	19	65
Nurserymen .....	..	..	..	1	..	1
Pastry cook .....	..	..	..	4	..	4
Painters .....	..	..	..	4	..	4
Peddlers .....	..	..	..	6	..	6
Photographers .....	1	..	1	3	..	3
Physicians .....	1	..	1	8	..	8
Plasterers .....	..	..	..	9	..	9
Pork packers .....	..	..	..	1	..	1
Potters .....	..	..	..	2	..	2
Preachers .....	3	..	3	15	..	15
Printers .....	1	..	1	6	..	6
Saddlers .....	1	..	1	5	..	5
Sailors .....	..	..	..	5	..	5
Salesmen .....	..	..	..	3	..	3
Saloon keepers .....	1	..	1	5	..	5
Seamstresses .....	..	3	3	..	14	14
Servants .....	..	3	3	..	28	28
Ship-steward .....	..	..	..	1	..	1
Shoe-makers .....	3	..	3	21	..	21
Silversmiths .....	1	..	1	1	..	1
Soldiers .....	1	..	1	3	..	3
Speculators .....	..	..	..	2	..	2
Stage-drivers .....	..	..	..	1	..	1
Stock dealers .....	..	..	..	3	..	3
Students .....	3	..	3	16	..	16
Surveyors .....	..	..	..	1	..	1
Tailors .....	3	..	3	17	..	17
Teachers .....	2	3	5	15	28	43
Teamsters .....	..	..	..	6	..	6
Tinners .....	..	..	..	6	..	6
Traders .....	1	..	1	9	..	9
Wagon-makers .....	2	..	2	4	..	4
Watch-makers .....	..	..	..	1	..	1
Weavers .....	1	..	1	3	1	4
Wheelwrights... ..	1	..	1	1	..	1
Total .....	286	183	469	2271	1782	4053

TABLE VIII.  
CIVIL CONDITION OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Single .....	144	42	186	1166	603	1769
Married .....	131	122	253	988	997	1985
Widowed.....	8	16	24	77	155	232
Divorced .....	1	1	2	14	18	32
Unknown .....	2	2	4	26	9	35
Total.....	286	183	469	2271	1782	4053

TABLE IX.  
HOW COMMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
By commissioners of insanity .....	279	183	462	1409	1037	2446
By judges of the circuit court .....				65	46	111
By clerks of the circuit court .....				36	26	62
By judges of the county court .....				490	462	952
By judges of the district court .....	2		2	13		13
By friends.....				174	169	343
By Governor's order .....	5		5	25		25
Private patients from other states and territories.				59	42	101
Total.....	286	183	469	2271	1782	4053

TABLE X.  
HOW SUPPORTED—OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
By the State alone.....	46	7	53	217	55	272
By counties .....	240	176	416	1817	1516	3333
By friends.....				179	169	348
By other states and territories .....				58	42	100
Total.....	286	183	469	2271	1782	4053



TABLE XI.

SUPPOSED OR ASSUMED CAUSES OF INSANITY.

CAUSES.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Female.	Total.
Abortion .....	...	...	...	...	2	2
Apoplexy .....	1	...	1	4	3	7
Blindness .....	1	...	1	3	1	4
Bodily injuries.....	1	...	1	13	3	16
Business anxieties .....	6	1	7	38	3	41
Change of life.....	...	7	7	...	37	37
Concussion .....	...	...	...	3	...	3
Connected with general ill health .....	23	17	40	118	152	270
Constitutional .....	4	5	9	53	44	97
Disappointed affections .....	2	1	3	16	24	40
Disappointment.....	3	1	4	11	11	22
Disease of the brain.....	...	...	...	1	...	1
Disordered menstruation.....	...	10	10	...	91	91
Domestic trouble.....	11	13	24	47	99	146
Epilepsy .....	20	2	22	206	84	290
Excessive study.....	1	1	2	8	2	10
Exposure to cold .....	...	1	1	5	2	7
Fright .....	...	4	4	10	14	24
Grief, loss of friends, etc .....	1	4	5	12	58	70
Hemiplegia .....	...	...	...	3	6	9
Heredity ... ..	7	8	15	83	86	169
Hysteria .....	...	1	1	...	5	5
Ill treatment.....	...	...	...	4	19	23
Injuries of the head .....	14	...	14	63	2	65
Intemperance .....	25	2	27	196	23	219
Jealousy .....	...	1	1	3	3	6
Lactation, protracted.....	...	1	1	...	7	7
Loss of health in military service .....	...	...	...	29	...	29
Loss of property .....	3	1	4	24	8	32
Loss of sleep .....	...	...	...	1	1	2
Masturbation .....	34	...	34	216	6	222
Measles .....	...	...	...	2	1	3
Meningeal inflammation .....	...	...	...	...	1	1
No satisfactory cause assigned .....	94	52	146	779	548	1327
Nostalgia .....	1	1	2	2	4	6
Not insane .....	...	...	...	4	...	4
Novel reading .....	...	...	...	...	1	1
Original defect.....	1	1	2	20	7	27
Over-exertion .....	17	4	21	72	26	98
Paralysis .....	...	...	...	6	3	9
Pecuniary anxiety .....	...	...	...	34	7	41
Political excitement .....	...	...	...	4	...	4
Poverty, hardships, etc.....	3	5	8	9	16	25
Puerperal condition.....	...	28	28	...	237	237
Religious excitement.....	4	6	10	75	55	130
Scarlet fever .....	1	1	2	2	2	4
Scrofula.....	...	...	...	...	1	1
Senility .....	2	...	2	15	4	19

TABLE XI—CONTINUED.

CAUSES.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Spermatorrhea .....	...	...	...	1	...	1
Spiritualism .....	...	...	...	5	5	10
Sun-stroke .....	3	1	4	27	2	29
Syphilis.....	1	1	2	19	4	23
Typhoid fever .....	...	...	...	16	11	27
Use of tobacco .....	...	...	...	1	1	2
Uterine disease .....	...	1	1	...	49	49
Vaccination .....	...	...	...	2	...	2
Venereal excesses.....	2	1	3	3	1	4
War excitement .....	...	...	...	3	...	3
Total .....	286	183	469	2271	1782	4053

TABLE XII.

FORM OF DISEASE IN THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Mania, acute.....	103	58	161	966	627	1593
Mania, chronic.....	78	45	123	610	473	1083
Mania, epileptic.....	16	1	17	181	84	265
Mania, puerperal .....	...	15	15	...	171	171
Mania, homicidal .....	...	...	...	15	...	15
Melancholia, acute.. ....	42	37	79	260	290	550
Melancholia, chronic.....	21	19	40	85	87	172
Dementia, acute .....	2	1	3	16	4	20
Dementia, chronic .....	19	6	25	118	42	160
Dementia, senile.....	5	1	6	15	3	18
Kleptomania.....	...	...	...	1	...	1
Dipsomania.....	...	...	...	...	1	1
Not insane.....	...	...	...	4	...	4
Total .....	286	183	469	2271	1782	4053

TABLE XIII.

COMPLICATIONS IN THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Epileptic.....	24	3	27	233	97	330
Apoplectic.....	2	1	3	9	6	15
Paralytic.....	.....	.....	.....	20	7	27
Suicidal.....	23	19	42	115	130	245
Homicidal.....	7	2	9	59	18	77
Hereditary.....	15	18	33	241	270	511
Chorea.....	.....	.....	.....	.....	3	3
None.....	215	140	355	1590	1251	2841
Not insane.....	.....	.....	.....	4	.....	4
Total.....	286	183	469	2271	1782	4053

TABLE XIV.

NUMBER OF THE ATTACK IN THOSE ADMITTED.

NUMBER.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
First.....	198	127	325	1545	1205	2750
Second.....	30	26	56	233	235	468
Third.....	6	9	15	57	59	116
Fourth.....	3	1	4	18	8	26
Fifth.....	1	2	3	6	6	12
Sixth.....	1	.....	1	3	3	6
Seventh.....	.....	.....	.....	1	.....	1
"Several".....	11	11	22	131	126	257
Unknown.....	36	7	43	273	140	413
Not insane.....	.....	.....	.....	4	.....	4
Total.....	286	183	469	2271	1782	4053

TABLE XV.

DURATION OF INSANITY BEFORE ENTRANCE OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Less than one month.....	49	30	79	344	216	560
One to three months.....	30	26	56	358	350	708
Three to six months.....	27	24	51	200	212	412
Six to nine months.....	20	16	36	157	155	312
Nine to twelve months.....	8	11	19	50	53	103
Twelve to eighteen months.....	17	16	33	144	110	254
Eighteen months to two years.....	3	10	13	38	52	90
Two to three years.....	20	13	33	123	104	227
Three to four years.....	11	5	16	90	66	156
Four to five years.....	9	1	10	61	45	106
Five to ten years.....	13	8	21	124	111	235
Ten to fifteen years.....	9	5	14	67	35	102
Fifteen to twenty years.....	1	2	3	37	18	55
Twenty to twenty-five years.....	3	....	3	15	6	21
Twenty-five to thirty years.....	....	....	....	6	2	8
Over thirty years.....	....	1	1	9	5	14
Unknown.....	66	15	81	444	242	686
Not insane.....	....	....	....	4	....	4
Total.....	286	183	469	2271	1782	4053

TABLE XVI.

RECOVERED OF THOSE ATTACKED AT THE SEVERAL AGES, FROM THE BEGINNING.

AGE WHEN ATTACKED.	NUMBER.			PER CENT RECOVERED OF THOSE ATTACKED AT EACH AGE.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under fifteen.....	11	9	20	9.90	14.28	11.49
Fifteen to twenty.....	102	84	186	45.73	42.42	44.18
Twenty to twenty-five.....	140	125	265	40.34	43.70	41.86
Twenty-five to thirty.....	108	109	217	39.13	36.82	37.93
Thirty to thirty-five ..	85	87	172	31.51	34.38	35.03
Thirty-five to forty.....	50	54	104	26.17	32.14	28.96
Forty to forty-five.....	55	32	87	40.14	27.58	34.34
Forty-five to fifty.....	36	21	57	33.02	22.82	28.35
Fifty to sixty.....	54	25	79	35.76	28.73	33.19
Sixty to seventy.....	9	1	10	14.75	5.00	12.34
Seventy to eighty.....	3	1	4	17.64	14.28	16.66
Unknown.....	71	37	108	17.48	18.87	17.94
Total.....	724	585	1309	.....	.....	.....

TABLE XVII.

RECOVERED AFTER VARIOUS DURATIONS OF THE DISEASE BEFORE TREATMENT FROM BEGINNING.

DURATION OF DISEASE BEFORE TREATMENT.	NUMBER.			PER CENT RECOVERED AFTER EACH PERIOD OF DURATION.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month .....	210	125	335	60.86	57.87	59.71
One to three months.....	190	187	377	53.07	53.42	53.24
Three to six months... ..	96	94	190	48.00	44.33	46.11
Six to nine months .....	62	57	119	39.49	36.77	38.14
Nine to twelve months .....	14	21	35	28.00	39.62	33.98
Twelve to eighteen months.....	28	27	55	19.44	24.54	21.65
Eighteen to twenty-four months...	3	9	12	7.89	17.30	13.33
Two to three years .....	7	4	11	5.69	3.84	4.84
Three to four years.....	6	3	9	6.66	4.54	5.76
Four to five years .....	3	1	4	4.91	2.22	3.77
Five to ten years.....	2	3	5	1.61	2.70	2.12
Over ten years .....	1	....	1	.74	.....	.50
Unknown .....	102	54	156	22.92	22.31	22.70
Total .....	724	585	1309	.....	.....	.....

TABLE XVIII.

DURATION OF TREATMENT OF THOSE RECOVERED FROM THE BEGINNING.

DURATION.	NUMBER RECOVERED.		
	Males.	Females.	Total.
Under one month .....	27	5	32
One to two months .....	43	27	70
Two to three months .....	63	48	111
Three to six months.....	221	174	395
Six to nine months .....	146	127	273
Nine to twelve months .....	82	60	142
Twelve to eighteen months.....	80	84	164
Eighteen to twenty-four months.....	27	21	48
Two to three years .....	25	28	53
Three to four years.....	5	7	12
Four to five years .....	1	2	3
Over five years .....	4	2	6
Total .....	724	585	1309

TABLE XIX.

WHOLE DURATION OF DISEASE OF THOSE RECOVERED FROM THE BEGINNING.

DURATION.	NUMBER RE- COVERED.		
	Males.	Females.	Total.
Under one month .....	...	2	2
One to two months .....	30	2	32
Two to three months .....	27	27	54
Three to six months .....	143	97	240
Six to nine months .....	146	137	283
Nine to twelve months .....	89	77	166
Twelve to eighteen months .....	100	93	193
Eighteen to twenty-four months .....	42	44	86
Two to three years .....	28	38	66
Three to four years .....	10	12	22
Four to five years .....	2	3	5
Over five years .....	10	6	16
Unknown .....	97	47	144
Total .....	724	585	1309

TABLE XX.

FORM OF DISEASE OF THOSE RECOVERED FROM THE BEGINNING.

FORM OF DISEASE.	NUMBER RE- COVERED.			PER CENT RECOVERED OF EACH FORM ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Mania, acute .....	550	323	873	56.77	51.51	54.76
Mania, chronic .....	40	21	61	6.55	4.43	5.63
Melancholia, acute .....	114	135	249	43.84	46.55	45.27
Melancholia, chronic .....	8	13	21	9.41	14.94	12.20
Mania, puerperal .....	...	88	88	...	51.46	51.46
Mania, epileptic .....	6	3	9	3.31	3.57	3.39
Mania, homicidal .....	3	...	3	20.00	...	20.00
Dementia, acute .....	3	1	4	18.75	25.00	20.00
Dipsomania .....	...	1	1	...	100.00	100.00
Total .....	724	585	1309	...	...	...

TABLE XXI.

CAUSES OF DISEASE OF THOSE RECOVERED FROM THE BEGINNING.

CAUSES OR CLASSES OF CAUSES.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Connected with ill health .....	40	66	106	33.59	43.42	39.25
Heredity .....	36	31	67	43.37	36.04	39.64
Disordered menstruation .....	.....	39	39	.....	42.85	42.85
Religious excitement .....	42	27	69	56.00	49.09	53.09
Business anxieties.....	17	2	19	44.73	66.66	46.34
Grief, loss of friends, etc.....	4	19	23	33.33	32.75	32.85
Masturbation .....	56	2	58	25.92	33.33	26.12
Novel reading .....	.....	1	1	.....	100.00	100.00
Domestic trouble .....	19	27	46	40.42	27.27	31.50
Puerperal condition.....	.....	107	107	.....	45.14	45.14
Loss of health in military service.....	16	.....	16	55.17	.....	55.17
Pecuniary anxiety.....	12	4	16	35.29	57.14	39.02
Disappointed affections .....	10	8	18	62.50	38.33	45.00
Spermatorrhœa .....	1	.....	1	100.00	.....	100.00
Over exertion.....	35	9	44	48.61	34.61	44.89
War excitement .....	3	.....	3	100.00	.....	100.00
Loss of sleep .....	1	.....	1	100.00	.....	50.00
Excessive study.....	3	1	4	37.50	50.00	40.00
Intemperance.....	77	12	89	39.28	52.17	40.63
Loss of property.....	5	2	7	20.83	25.00	21.87
Typhoid fever .....	6	4	10	37.50	36.36	37.03
Meningeal inflammation .....	.....	1	1	.....	100.00	100.00
Senility .....	1	.....	1	6.66	.....	5.26
Hysteria.....	.....	3	3	.....	60.00	60.00
Epilepsy .....	4	3	7	1.94	3.57	2.41
Injury of the head.....	23	.....	23	36.50	.....	35.38
Vaccination .....	1	.....	1	50.00	.....	50.50
Excessive use of tobacco .....	1	1	2	100.00	100.00	100.00
Constitutional .....	42	21	63	79.24	47.72	64.94
Uterine disease .....	.....	14	14	.....	28.57	28.57
Spiritualism .....	2	1	3	40.00	20.00	30.00
Fright.....	3	4	7	30.00	28.56	29.16
Disappointment .....	4	3	7	36.36	27.27	31.81
Change of life .....	.....	10	10	.....	27.02	27.02
Ill treatment.....	1	7	8	25.00	36.84	34.78
Original defect .....	2	.....	2	10.00	.....	7.40
Political excitement .....	2	.....	2	50.00	.....	50.00
Exposure to cold.....	2	1	3	40.00	50.00	42.85
Sun-stroke .....	10	.....	10	37.03	.....	34.48
Syphilis .....	4	1	5	21.05	25.00	21.73
Bodily injuries.....	2	3	5	15.38	100.00	31.25
Lactation, protracted.....	.....	1	1	.....	14.28	14.28
Paralysis .....	.....	1	1	.....	33.33	11.11
Measles.....	1	.....	1	50.00	.....	33.33
Poverty, hardships, etc.....	2	4	6	22.22	25.00	24.00
Blindness.....	1	.....	1	33.33	.....	25.00

TABLE XXI—CONTINUED.

CAUSES OR CLASSES OF CAUSES.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Nostalgia.....	1	1	1	25.00		16.66
Jealousy.....	1		1	33.33		16.66
Concussion....	1		1	33.33		33.33
Disease of brain..	1		1	100.00		100.00
Venereal excesses.....	1	1	2	33.33	100.00	50.00
No satisfactory cause assigned.....	229	143	372	29.35	26.09	28.01
Total .....	724	585	1309			

TABLE XXII.

NATIVITY, ETC., OF THOSE RECOVERED FROM THE BEGINNING.

COUNTRY.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Maine.....	8	6	14	34.78	40.00	36.84
New Hampshire.....	4	2	6	40.00	22.22	31.57
Vermont.....	5	5	10	22.72	25.00	23.80
Massachusetts.....	11	6	17	34.37	31.57	33.33
Rhode Island.....		2	2		33.33	33.33
Connecticut.....	2	2	4	14.28	22.22	17.39
New York.....	47	37	84	29.37	28.68	29.06
New Jersey.....	3	3	6	20.00	42.85	27.27
Pennsylvania.....	60	49	109	32.08	36.56	33.95
Maryland.....	5	2	7	21.73	20.00	21.21
Virginia.....	16	16	32	28.07	38.09	32.32
North Carolina.....	8	2	10	47.05	22.22	38.46
South Carolina.....	2		2	50.00		22.22
Alabama.....	1		1	50.00		33.33
Louisiana.....	1		1	50.00		33.33
Ohio.....	132	126	258	35.10	38.53	36.69
Indiana.....	57	51	108	33.33	36.16	34.61
Illinois.....	32	34	66	43.24	35.08	38.59



TABLE XXII—CONTINUED.

COUNTY.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Kentucky.....	14	12	26	24.13	33.33	27.65
Tennessee .....	8	6	14	34.78	28.57	31.81
Missouri .....	10	5	15	25.64	25.00	25.42
Michigan .....	4	2	6	33.33	33.33	33.33
Wisconsin .....	5	8	13	50.00	88.88	68.42
Iowa .....	91	76	167	41.36	44.70	42.82
Minnesota ..	1	.....	1	100.00	.....	100.00
District of Columbia.....	.....	2	2	.....	100.00	100.00
New Mexico.....	1	.....	1	100.00	.....	100.00
Canada .....	12	6	18	40.00	40.00	40.00
Nova Scotia .....	.....	1	1	.....	20.00	14.28
Norway .....	6	4	10	24.00	25.00	24.39
Sweden .....	16	4	20	33.33	18.18	28.58
Holland .....	1	3	4	16.66	60.00	36.36
Belgium .....	1	.....	1	50.00	.....	50.00
Bohemia .....	2	3	5	13.33	21.42	17.24
France .....	4	1	5	28.57	16.66	25.00
Portugal .....	1	.....	1	100.00	.....	100.00
Switzerland .....	5	3	8	26.31	21.42	24.24
Netherlands .....	6	1	7	100.00	100.00	100.00
Germany .....	43	40	83	22.39	22.34	22.37
Austria .....	1	.....	1	25.00	.....	16.66
Prussia .....	3	4	7	18.75	26.66	22.58
Denmark .....	3	.....	3	33.33	.....	25.00
England .....	17	18	35	30.35	34.61	32.40
Ireland .....	44	29	73	25.14	23.38	24.41
Scotland .....	10	2	12	45.45	40.00	44.44
Wales .....	3	.....	3	37.50	.....	25.00
Unknown .....	18	12	30	31.03	24.48	28.03
Total .....	724	585	1309	.....	.....	.....

TABLE XXIII

DEATHS AND CAUSES.

CAUSES.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Chronic insanity .....	12	16	28	94	70	164
Exhaustion from acute mania.....	3	...	3	33	23	56
Typho-mania .....	...	...	...	7	6	13
Acute delirious mania .....	1	4	5	10	11	21
Melancholia with abstinence from food .....	...	...	...	12	10	22
Softening of the brain.....	1	...	1	3	...	3
Congestion of the brain .....	...	...	...	8	2	10
Organic disease of the brain.....	...	...	...	2	...	2
General paralysis .....	...	...	...	13	3	16
Apoplexy .....	4	...	4	29	15	44
Hemiplegia .....	...	...	...	3	1	4
Epilepsy .....	6	4	10	91	37	128
Puerperal mania.....	...	...	...	...	6	6
Suicide.....	1	1	2	9	7	16
Consumption .....	8	11	19	93	91	184
Congestion of lungs.....	...	...	...	1	2	3
Abscess of lung.....	1	...	1	3	...	3
Bronchitis .....	...	...	...	1	...	1
Typhoid fever .....	...	...	...	...	2	2
Intermittent fever .....	...	1	1	1	1	2
Congestive fever.....	...	...	...	...	1	1
Dysentery and diarrhoea .....	...	1	1	25	24	49
Cholera morbus.....	...	...	...	1	1	2
Chronic gastritis.....	...	...	...	1	3	4
Chronic hepatic disease .....	...	...	...	1	1	2
Strangulated hernia.....	...	1	1	...	2	2
Peritonitis .....	...	...	...	...	1	1
Diabetes .....	...	...	...	1	...	1
Dropsy.....	1	2	3	2	2	4
Disease of the heart.....	...	...	...	3	4	7
Uterine hemorrhage .....	...	...	...	...	1	1
Uterine disease .....	...	...	...	...	1	1
Erysipelas .....	1	...	1	4	1	5
Syphilis.....	...	...	...	6	...	6
Senility .....	8	1	4	14	5	19
Accident.....	...	...	...	1	1	2
Enteritis .....	1	...	1	2	...	2
Scrofula .....	...	...	...	1	...	1
Pneumonia .....	...	...	...	1	...	1
Obscure brain disease .....	2	...	2	5	2	7
Paraplegia .....	1	...	1	2	...	2
Cancer .....	...	...	...	1	...	1
Paralysis.....	...	...	...	3	...	3
Cerebro spinal meningitis .....	...	...	...	...	1	1
Pleurisy .....	2	...	2	3	...	3
Anæmatosis .....	...	...	...	1	...	1
Injuries received before admission .....	...	...	...	1	...	1
Pericarditis .....	1	...	1	1	...	1
Total .....	49	42	91	493	338	831

TABLE XXIV.

AGES AT DEATH.

AGE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under fifteen .....	1	.....	1	5	3	8
Fifteen to twenty.....	.....	1	1	19	19	38
Twenty to twenty-five .....	3	4	7	49	36	85
Twenty-five to thirty.....	6	3	9	66	35	101
Thirty to thirty-five.....	3	4	7	52	56	108
Thirty-five to forty.....	8	9	17	71	48	119
Forty to forty-five .....	5	7	12	45	36	81
Forty-five to fifty .....	6	5	11	48	23	71
Fifty to sixty .....	9	5	14	56	46	102
Sixty to seventy.....	5	2	7	44	17	61
Seventy to eighty .....	1	1	2	19	8	27
Eighty to ninety .....	2	.....	2	4	.....	4
Unknown .....	.....	1	1	15	11	26
Total .....	49	42	91	493	338	831

TABLE XXV.

RATIO OF DEATHS FROM THE BEGINNING.

PER CENT.	Males.	Females.	Total.
Of all admitted .....	21.70	18.96	20.50

TABLE XXVI.

DURATION OF DISEASE OF THOSE WHO DIED, FROM THE BEGINNING.

	FROM ADMIS- SION INTO HOSPITAL.			FROM THE ATTACK.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	69	47	116	18	17	35
One to two months .....	28	24	52	11	13	24
Two to three months.....	31	15	46	9	4	13
Three to six months .....	58	35	93	18	23	41
Six to nine months.....	42	19	61	18	24	42
Nine to twelve months.....	31	25	56	18	13	31
Twelve to eighteen months .....	44	27	71	45	24	69
Eighteen to twenty-four months .....	35	17	52	21	18	39
Two to three years.....	51	44	95	44	29	73
Three to four years .....	34	27	61	28	17	45
Four to five years.....	20	15	35	22	13	35
Five to ten years.....	42	32	74	71	50	121
Ten to twenty years.....	8	11	19	75	38	113
Over twenty years .....	.....	.....	.....	19	6	25
Unknown.....	.....	.....	.....	76	49	125
Total .....	493	338	831	493	338	831

TABLE XXVII.

REMAINING IN THE HOSPITAL AT THE END OF THE PERIOD.

AGE.	Males.	Females.	Total.
Under fifteen.....	1	2	3
Fifteen to twenty .....	12	12	24
Twenty to twenty-five .....	27	9	36
Twenty-five to thirty .....	34	34	68
Thirty to thirty-five .....	37	27	64
Thirty-five to forty .....	38	34	72
Forty to forty-five.....	27	32	59
Forty-five to fifty.....	32	13	45
Fifty to sixty.....	31	38	69
Sixty to seventy.....	20	10	30
Seventy to eighty.....	3	1	4
Eighty to ninety.....	1	1	2
Unknown .....	4	2	6
Total....	267	215	482

TABLE XXVIII.

REMAINING AT THE END OF THE PERIOD—DURATION OF DISEASE.

	SINCE ENTER- ING THE HOS- PITAL.			SINCE THE AT- TACK.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month .....	8	8	16	1	1	2
One to two months.....	14	6	20	1	1	2
Two to three months.....	10	10	20	5	3	8
Three to six months .....	33	24	57	16	7	23
Six to twelve months.....	42	19	61	10	20	30
Twelve to eighteen months.....	28	21	49	22	13	35
Eighteen to twenty-four months .....	21	16	37	10	18	28
Two to three years.....	28	31	59	30	30	60
Three to five years .....	43	39	82	34	30	64
Five to ten years.....	30	28	58	37	31	68
Ten to fifteen years .....	8	9	17	12	16	28
Fifteen to twenty years.....	2	4	6	6	5	11
Twenty to twenty-five years.....				5	3	8
Twenty-five to thirty years.....				1	5	6
Thirty to forty years.....				2		2
Over forty years .....					1	1
Unknown.....				75	36	111
Total .....	267	215	482	267	215	482

DAILY AVERAGE OF PATIENTS.

1877 AND 1878.	1878 AND 1879.
October, 1877 .....	October, 1878.....
November, 1877 .....	November, 1878 .....
December, 1877.....	December, 1878.....
January, 1878 .....	January, 1879 .....
February, 1878 .....	February, 1879.....
March, 1878 .....	March, 1879 .....
April, 1878 .....	April, 1879 .....
May, 1878 .....	May, 1879 .....
June, 1878.....	June, 1879.....
July, 1878 .....	July, 1879.....
August, 1878 .....	August, 1879 .....
September, 1878 .....	September, 1879.....

Daily average for the period, 525.54.

## EXHIBIT

*Of Expenditures of Special Appropriations by the Sixteenth and Seventeenth General Assemblies from October 1, 1877, to October 1, 1879.*

## RECEIPTS.

From balance on hand from appropriation of Sixteenth General Assembly, September 30, 1877.....	\$ 732 67	
From Auditor of State.....	24,800 00	
From surplus iron beams returned.....	24 28	
	<hr/>	\$ 25,556 95

## EXPENDITURES.

For enlarging well (Sixteenth General Assembly).....	\$ 155 74	
For airing courts (Sixteenth General Assembly) .....	382 75	
For water-closets (Sixteenth General Assembly) .....	194 14	
For repairing sub-basement (Sixteenth General Assembly) .....	5,000 00	
For completion of new building.....	5,001 75	
For rear center and mangle .....	11,161 85	
For water-pipes (protection vs. fire) .....	1,021 32	
For kitchen furniture.....	800 00	
For laboratory .....	1,038 86	
For contingencies (salary M. L. Edwards) .....	109 31	
	<hr/>	\$ 24,865 72
Balance October 1, 1879 .....		691 23
		<hr/>
		\$ 25,556 95

## CURRENT EXPENSE FUND.

*Exhibit of Steward for year ending October 1, 1878.*

## RECEIPTS.

From balance on hand October 1, 1877.....		\$ 1,875 20
From Auditor of State.....	\$127,300 00	
From articles sold... ..	1,859 37	
From private patients.....	1,003 13	
From interest on warrants.....	638 41	
From freight returned.....	36 08	
	<hr/>	\$130,836 99
		<hr/>
		\$132,712 19

## EXPENDITURES.

For meats and fish... ..	\$ 8,557 63	
For breadstuffs.....	6,583 78	
For fruit and vegetables....	677 24	
For coffee and tea.....	2,354 51	
For sugar and syrup.....	3,310 25	
For groceries.....	1,616 08	
For butter.....	4,693 70	
For cheese and eggs.....	1,001 21	
For mortuary expenses.....	129 75	
For medicinal supplies.....	3,858 58	
For postage and stationery.....	815 27	
For dry goods and clothing.....	7,961 67	
For library and diversions.....	1,648 52	
For furniture and furnishing.....	4,342 73	
For repairs.....	6,451 42	
For hardware and queensware... ..	1,717 78	
For interest and discount.....	4,217 88	
For contingencies.....	2,752 18	
For Visiting Committee.....	307 50	
For painters' supplies .....	512 70	
For farm.....	3,037 13	
For feed.....	2,358 82	
For fuel.....	7,238 82	
For lights.....	3,836 40	
Salaries and wages.....	40,048 64	
	<hr/>	\$120,030 19
Balance on hand September 30, 1878.....		12,682 00
		<hr/>
		\$132,712 19

## CURRENT EXPENSE FUND—CONTINUED.

*Exhibit of Steward for year ending October 1, 1879.*

## RECEIPTS.

From balance on hand October 1, 1878 .....	\$ 12,682 00	
From Auditor of State.....	87,248 00	
From articles sold.....	2,012 37	
From private patients.....	903 87	
From interest on warrants.....	1,221 68	
From premium on horse.....	9 00	
From freight returned.....	23 25	
From return of express and telegraphing .....	1 00	
From return of traveling expenses.....	20 65	
	<hr/>	\$104,121 82

## EXPENDITURES.

For meats and fish....	\$ 6,263 92	
For breadstuffs.....	3,315 61	
For fruit and vegetables.....	303 93	
For coffee and tea .....	1,574 15	
For sugar and syrup.....	2,676 88	
For groceries.....	1,216 28	
For butter.....	1,763 34	
For eggs.....	272 64	
For mortuary expenses.....	154 19	
For medicinal supplies.....	2,174 52	
For postage and stationery .....	619 01	
For dry goods and clothing .....	4,054 91	
For library and diversions.....	1,020 62	
For furniture and furnishing.....	1,740 61	
For repairs.....	9,063 06	
For hardware and queensware.....	879 46	
For interest and discount.....	2,239 67	
For contingencies .....	1,525 32	
For visiting committee.....	232 20	
For painters' supplies.....	399 63	
For farm .....	1,363 95	
For feed.....	1,213 01	
For fuel... ..	7,760 36	
For lights .....	3,132 29	
For salaries and wages .....	36,510 58	
	<hr/>	\$ 91,470 14
Less \$252.29, included by error in current expense for January, 1879. See special appropriation, where it belongs and is charged.....		<hr/> 252 29
		<hr/> \$ 91,217 85
Balance October 1, 1879 .....		12,903 97
		<hr/> \$104,121 82



## TREASURER'S EXHIBIT.

## CURRENT EXPENSE FUND FROM OCTOBER 1, 1877, TO OCTOBER 1, 1879.

Amount of payments during the period .....	\$	205,615 97
Balance on hand October 1, 1877.....	\$	1,875 20
Amount received of state Treasurer..	\$	192,164 00
Amount received of steward.....		7,728 81
		<u>199,892 81</u>
Total debits.....	\$	201,768 01
Amount overpaid.....		3,847 96
Deduct for error reported by the steward and corrected in acc't.		<u>252 29</u>
Balance October 1, 1879.....	\$	3,595 67

## IMPROVEMENT FUND.

Balance on hand October 1, 1877.....	\$	732 67
Amount received of state Treasurer .....		24,800 00
Amount received of steward .....		<u>24 28</u>
Total .....	\$	25,556 95
Amount of payments .....		<u>24,865 72</u>
Balance on hand October 1, 1879.....	\$	691 23

The foregoing is a true exhibit.

M. L. EDWARDS, *Treasurer.*

October 3, 1879.

EXPENDITURES.

The following exhibit shows the expenditures of the Special Appropriation Fund, in detail, from October 1, 1877, to October 1, 1879 ; to whom money was paid, and for what purposes money was expended.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1877.				
October. .	1	P. T. Twinting & Son . . . . .	Lumber . . . . .	\$ 93 74
October. .	2	Chas Snider . . . . .	White lead . . . . .	128 00
October. .	3	Morris, Tasker & Co. . . . .	Soil pipe, etc. . . . .	33 44
October. .	4	Time bill—October . . . . .	Salaries and wages . . . . .	593 85
1878.				
April . . .	1	D. B. Stevens . . . . .	Brick . . . . .	53 55
April . . .	2	Jno. Rukgaber . . . . .	Window jams, corbels, etc. . . . .	145 75
April . . .	3	Milwaukee Cement Co. . . . .	Cement . . . . .	143 00
April . . .	4	A. J. Fish & Co. . . . .	Cracker breaker . . . . .	95 00
April . . .	5	A. J. Fish & Co. . . . .	Cracker machine . . . . .	175 00
April . . .	6	A. J. Fish & Co. . . . .	"Vale's" bake oven . . . . .	734 07
April . . .	7	A. J. Fish & Co. . . . .	Pulleys and hangers . . . . .	60 36
April . . .	8	C. B. & Q. R. R. . . . .	Freight . . . . .	116 78
April . . .	9	Time bill—April . . . . .	Salaries and wages . . . . .	186 87
May . . . .	1	D. B. Stevens . . . . .	Brick . . . . .	80 47
May . . . .	2	Geo. Cobb . . . . .	Lime . . . . .	20 30
May . . . .	3	William Kean . . . . .	Stone . . . . .	30 20
May . . . .	4	Time bill—May . . . . .	Salaries and wages . . . . .	410 83
June. . . .	5	Edd Allen . . . . .	Sand . . . . .	5 08
June. . . .	6	Jno. Rukgaber . . . . .	Cut stone and sawed flag . . . . .	247 55
June. . . .	7	William Burns . . . . .	Sand . . . . .	47 32
June. . . .	8	Donahue, McCosh & Co. . . . .	Lime . . . . .	22 50

June.....	9	M. L. Edwards.....	8	57
June.....	10	Shane & Crable.....	8	53
June.....	11	Royce & Hopping.....	167	21
June.....	12	Bay State Laundry Co.....	350	00
June.....	13	D. B. Stevens.....	29	00
June.....	14	Geo. Cobb.....	17	33
June.....	15	J. P. W. Jenkins.....	10	96
June.....	16	Lucius Wells.....	2	18
June.....	17	Rath & McMahon.....	105	00
June.....	18	H. H. Reynolds.....	16	44
June.....	19	R. & J. Beck.....	641	59
June.....	20	T. S. & A. J. Kirkwood.....	43	16
June.....	21	John M. Maris & Co.....	72	25
June.....	22	B. F. Ross.....	25	80
June.....	23	Royce & Hopping.....	28	76
June.....	24	W. A. Cobb.....	25	24
June.....	25	Time bill—June.....	434	12
July.....	26	Patrick O'Connor.....	70	25
July.....	27	Peter Schwellenbolg.....	12	00
July.....	28	John Rukgaber.....	211	83
July.....	29	Thos. A. Upham.....	27	50
July.....	30	Taylor & Bro.....	3	50
July.....	31	R. & J. Beck.....	114	98
July.....	32	Time bill—July.....	558	34
August.....	33	Patrick O'Connor.....	178	28
August.....	34	Pancoast & Manle.....	1021	32
August.....	35	Patrick O'Connor.....	216	05
August.....	36	John Rukgaber.....	228	74
August.....	37	Time bill—August.....	548	44
August.....	38	Ketcham, Officer & Co.....	10	00
August.....	39	C. B. & Q. R. R.....	23	13
Septemb'r.....	1	M. L. Edwards.....	30	47
Septemb'r.....	2	Time bill—September.....	540	28
Septemb'r.....	3	Patrick O'Connor.....	238	11
Septemb'r.....	4	Milwaukee Cement Co.....	67	00
October.....	5	Time bill—October.....	587	27
October.....	6	D. B. Stevens.....	153	45
Novemb'r.....	7	Pott, Young & Co.....	41	80



March .....	2	Jno. Rukgaber.....	Kitchen furnishing.....	247 60
March .....	3	Milwaukee Cement Co.....	Cement.....	87 00
March .....	4	Union Foundry works.....	Iron beams.....	11 36
March .....	5	Milwaukee Cement Co.....	Cement .....	87 00
March .....	6	Time bill—March.....	Salaries and wages.....	554 70
April .....	7	D. B. Stevens .....	Brick.....	59 87
April .....	8	Union Foundry Works.....	Iron beams, etc.....	28 84
April .....	9	Milwaukee Cement Co.....	Cement.....	87 00
April .....	10	Time bill—April.....	Salaries and wages.....	675 00
May .....	11	Jno. Rukgaber.....	Window sills .....	129 00
May .....	12	Milwaukee Cement Co.....	Cement.....	172 48
May .....	13	Cardiff Plaster Mills .....	Plaster .....	114 40
May .....	14	John Henne .....	Brick.....	152 12
May .....	15	Donahue, McCosh & Co.....	Lime .....	34 00
May .....	16	Crane Bros M'fg Co.....	Registers .....	20 91
May .....	17	Andrew Gruber .....	Repairing tools .....	15 85
May .....	18	Time bill—May.....	Salaries and wages.....	689 78
June.....	19	Franklin Lester .....	Kitchen furniture .....	285 84
June.....	20	C., B. & Q. R. R.....	Freight.....	205 40
June.....	21	Patrick O'Connor .....	Door-step and water-table .....	8 60
July .....	1	Time bill—June.....	Salaries and wages.....	454 62
July .....	2	Royce & Hopping.....	Iron stairway .....	116 80
July .....	3	Milwaukee Cement Co.....	Cement.....	87 00
July .....	4	D. B. Stevens .....	Brick.....	130 72
July .....	5	Time bill—July.....	Salaries and wages.....	309 07
July .....	6	Leedham & Baugh.....	Doors and sash .....	118 40
July .....	7	D. B. Stevens .....	Brick .....	58 65
July .....	8	D. B. Stevens .....	Brick .....	73 37
July .....	9	Milwaukee Cement Co.....	Cement.....	87 00
July .....	10	Time bill—August.....	Salaries and wages.....	291 37
July .....	11	R. & J. Beck.....	Laboratory.....	8 09
July .....	12	Time bill—September.....	Salaries and wages.....	406 75
July .....	13	Freight .....	C., B. & Q. R. R.....	110 90

## EXPENDITURES.

The following exhibit shows the expenditures of the Current Expense Fund, from October 1, 1877, to October 1, 1879, to whom paid, and for what purposes money was expended.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
October.. 1877.	1	J. D. Trowbridge.	Potatoes.	29 59
October..	2	John McKinley.	Butter.	10 05
October..			Shirting	256 10
October..		ella.	Coffee	533 00
October..			Clothing	1025 10
October..		Young, Smyth, Field & Co.	Table linen, toweling, etc.	259 55
October..		Edward R. Squibb	Medical supplies.	144 89
October..		Grannis & Farwell.	Syrup, rice, beans.	184 90
October..		M. W. Farber.	Tubs and coopering.	19 00
October..		Thos. Giblein	Apples	15 50
October..		Thos. Giblein	Apples	17 08
October..		W. Allsop.	Apples	21 15
October..		A. K. Wickersham.	Interest on loan to treasurer	21 10
October..		Frank Hobart.	Brooms and brushes.	24 00
October..		Daniel Nugent.	Corn	40 44
October..		M. F. Bevans	Cider	10 50
October..		James Hurd.	Corn	125 30
October..		J. W. Morrison	Corn	6 42
October..		E. L. Penn.	Calico, cotton flannel, buttons, etc.	31 18
October..		E. L. Penn & Co.	Boots, shoes, slippers, hats	274 70
October..		E. S. Wharton	Apples	59 00
October..		M. L. Edwards.	Discount on State warrants	606 00

October..	23 M. V. Derr.....	15 18
October..	24 A. O. Devel & Co.....	26 95
October..	25 Royce & Hopping.....	6 10
October..	26 R. C. Wells .....	2 85
October..	27 Journal Publishing Co.....	14 00
October..	28 Griffith & Burkett.....	38 00
October..	29 B. H. Crane.....	77 00
October..	30 A. M. Brown .....	14 48
October..	31 .....	4 55
October..	32 .....	115 28
October..	33 .....	7 12
October..	34 M. W. Farber.....	22 00
October..	35 Hawk Eye Publishing Co.....	26 50
October..	36 Ned Burns.....	18 02
October..	37 F. Wharton.....	90 60
October..	38 Hugh Swan.....	970 02
October..	39 S. L. Kincaid.....	25 00
October..	40 B. C. Kauffman .....	414 91
October..	41 Western Union Telegraph Co.....	3 09
October..	42 Novelty Wire Works.....	6 00
October..	43 J. R. Mack.....	5 00
October..	44 John Brown & Co.....	88 40
October..	45 A. Kammerer.....	36 00
October..	46 Ketcham, Officer & Co.....	1314 18
October..	47 H. F. Bird .....	288 68
October..	48 P. Jericho.....	15 30
October..	49 H. C. Brown .....	364 00
October..	50 P. Summers .....	288 02
October..	51 W. F. Dougherty.....	374 45
October..	52 Farmers' Co-operative Store .....	188 71
October..	53 J. W. Henderson.....	53 06
October..	54 Mary Sutton .....	18 00
October..	55 C. B. & Q. R. R. ....	122 67
October..	56 Male employees.....	1765 24
October..	57 Female employees .....	707 51
October..	58 Day laborers.....	628 12
Novemb'r	1 J. W. Williams .....	22 65
Novemb'r	2 Edward R. Squibb .....	275 90
	down-guards.....	
	etc.....	

EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Varrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1877.				
Novemb'r	3	Edward L. Wilson	Library and diversions	7 00
Novemb'r	4	Field, Leiter & Co	Dry goods and clothing	468 33
Novemb'r	5	Van Shaack, Stevenson & Co.	Medical supplies	83 50
Novemb'r	6	John H. Gear	Farina	5 28
Novemb'r	7	William Blom	Soap	99 00
Novemb'r	8	Grannis & Farwell	Beans	18 06
Novemb'r	9	McNab & Johnston	Codfish	46 35
Novemb'r	10	P. T. Twinting & Son	Lumber, flooring	137 79
Novemb'r	11	Bowman & Kauffman	Coal	93 98
Novemb'r	12	C. Bechler	Butter	102 51
Novemb'r	13	Ross Virden	Eggs	3 75
Novemb'r	14	R. M. Campbell	One horse	150 00
Novemb'r	15	L. H. Fenton	Digging graves	19 75
Novemb'r	16	Garlick, Waters & Co	Woolen goods and hosiery	158 37
Novemb'r	17	John Fay & Co	Carpenter's materials	6 15
Novemb'r	18	Abrahamson & Swan	Butter	63 36
Novemb'r	19	Hugh Swan	Twelve steers	847 80
Novemb'r	20	William Campbell	Butter and cheese	138 48
Novemb'r	21	W. A Cobb	Lime	69 52
Novemb'r	22	Rukgaber & Clarke	Hardware and tinware	204 99
Novemb'r	23	Sol Hewitt	Butter, eggs, fish	38 00
Novemb'r	24	George A. Talley	Repairs to wagons	6 25
Novemb'r	25	L. W. Taylor & Co.	Flour and bran	98 05
Novemb'r	26	P. T. Twinting	Groceries	119 88
Novemb'r	27	L. P. Mills	Potatoes, codfish	5 61
Novemb'r	28	D. L. Morse	Horseshoeing	6 25
Novemb'r	29	Ross & Bros	Lumber	15 84



Novemb'r	30	Chas. Snider & Co.	Medical supplies	14	54
Novemb'r	31	Mt. Pleasant Gas Works	Lights	359	60
Novemb'r	32	Mt. Pleasant Gas Works	Gas-fixtures	12	50
Novemb'r	33	J. A. Grant	Flour	780	65
Novemb'r	34	Donahue, McCosh & Co.	Lime	37	50
Novemb'r	35	Western Cement Association	Cement	82	50
Novemb'r	36	Field, Leiter & Co	Dry goods	264	64
Novemb'r	37	Rob't Haney	Gas-burners	10	00
Novemb'r	38	John Flamme	Turkeys	18	20
Novemb'r	39	William Burns	Turkeys	14	40
Novemb'r	40	Patrick McGuire	Turkeys	18	75
Novemb'r	41	John M. Fisher	Patent restraints	72	00
Novemb'r	42	T. P. Morehead	Pasturage	8	50
Novemb'r	43	P. Melcher	Cutting marble tile	1	50
Novemb'r	44	Mt. Pleasant post-office	Postage and stationery	50	40
Novemb'r	45	J. Miller	Potatoes and farina	3	35
Novemb'r	46	T. W. Fawcett	Visting Committee	20	00
Novemb'r	47	Ed E. Sayles	Library	3	60
Novemb'r	48	Spencer & Mahin	Butter	9	16
Novemb'r	49	John Eshelman	Clothing	8	75
Novemb'r	50	P. C. Tiffany	Stationery	4	10
Novemb'r	51	Templin Bros. & Woods	Dry goods	45	94
Novemb'r	52	S. N. Thompson & Co.	Hardware and queensware	12	00
Novemb'r	53	S. W. Garvin	Under-clothing	5	93
Novemb'r	54	Journal Publishing Co.	Printing	24	00
Novemb'r	55	Lehew & McKibben	Butter	55	31
Novemb'r	56	Meno Trope	Interest on loan to treasurer	12	42
Novemb'r	57	H. M. Bassett	Interest on loan to treasurer	26	80
Novemb'r	58	H. M. Bassett	Interest on loan to treasurer	61	66
Novemb'r	59	Mark Ranney	Interest on loan to treasurer	433	01
Novemb'r	60	M. L. Edwards	Discount	360	00
Novemb'r	61	Grannis & Farwell	Beans	17	41
Novemb'r	62	McNab & Johnston	Codfish	46	30
Novemb'r	63	American Fusee Co.	Lights	15	00
Novemb'r	64	Auten & Andrews	Coal	270	00
Novemb'r	65	A. G. Adams	Boots and shoes	52	45
Novemb'r	66	T. W. Barhydt & Co.	Boots and shoes	61	40
Novemb'r	67	William Brown & Bros	Coal	27	09

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1877.				
Novemb'r	68	N. Grensel	Coal	18 00
Novemb'r	69	Mt. Pleasant Gas Co.	Lights	488 00
Novemb'r	70	G. A. Talley	Wagon repairs	16 20
Novemb'r	71	C., B. & Q. R. Co.	Freight	409 94
Novemb'r	72	Male employees	Salaries and wages	1716 63
Novemb'r	73	Female employees	Salaries and wages	741 89
Novemb'r	74	Day laborers	Salaries and wages	1063 97
December	1	J. B. Holland	Library	5 00
December	2	M. L. Edwards	Commission as treasurer	176 21
December	3	L. E. Sherman	Tile	163 60
December	4	S. L. Steele	Contingencies	9 50
December	5	Emma Keelson	To making 301 bed ticks, at 20 cents	60 20
December	6	H. Harrison	Lard	15 00
December	7	Jno. Rukgaber	Sawed flag	209 96
December	8	Thomas Campbell	One horse	125 00
December	9	Jno. Thomas	Honey	5 17
December	10	J. L. Chute	Removing J. B. Chute to Nova Scotia	30 00
December	11	Benernan & Wilson	Library and diversions	154 55
December	12	James Frame	Head of sheep	18 00
December	13	William Davis	ars	281 81
December	14	H. B. Swan	and cement	94 78
December	15	William Campbell	and furnishing	127 93
December	16	P. Saunders & Son		97 29
December	17	McGregor & Baines		70 99
December	18	A. Singer & Co.	es, silppers	8 25
December	19	A. O. Devol & Co.	h brushes	27 70
December	20	Pitcher & Pyle		10 20



EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1877.				
December	59	Geo. H. Schafer & Co.	Medical supplies.	\$ 151 35
December	60	Mary Smith.	Music	16 00
December	61	C. B. & Q. R. R.	Freight.	408 85
December	62	Male employees.	Salaries and wages.	1824 51
December	63	Female employees	Salaries and wages.	744 35
December	64	Day laborers.	Salaries and wages.	660 54
December	65	Officers' salaries.	Salaries and wages.	1650 00
1878.				
January	1	A. H. Roberts.	Medical supplies.	1 20
January	2	Zulm & Thomas.	Express wagon, repairs, etc.	183 10
January	3	R. R. Grant.	Cattle	487 22
January	4	Louis Hisel.	Corn	141 66
January	5	Abraham Fetty.	Butter.	3 52
January	6	Jno. Rukgaber.	Window sills	17 87
January	7	E. D. Rand & Co.	Flooring.	408 00
January	8	W. S. Minkler & Co.	Glass.	10 40
January	9	L. E. Sherman	Overflow basins, self-closing cocks	204 75
January	10	J. H. Febbe.	Beans	125 93
January	11	Dorahue, McCosh & Co.	Cement.	33 00
January	12	Grannis & Farwell	Tapioca, farina.	18 30
January	13	McNab & Johnston.	Codfish	90 49
January	14	Hallock, Holmes & Co.	Rubber spittoons	70 70
January	15	Geo. H. Schafer & Co.	Medical supplies.	74 25
January	16	C. P. Squires & Co.	Medical supplies.	22 75
January	17	Iowa State Register.	Exchanges	12 00
January	18	Hawk-Eye Publishing Co.	Exchanges	18 00
January	19	Burnham & Jagger	Linseed oil.	90 18

January .	20	Fieldhouse, Dutcher & Belden.....	Gas-fittings.....	84 43
January .	21	Field, Leiter & Co.....	Dry goods.....	228 41
January .	22	T. H. Nevin & Co.....	Putty.....	6 00
January .	23	Wm. McCully & Co.....	Glass.....	103 04
January .	24	Lowell Felting Mills.....	Felting.....	41 21
January .	25	Morris Tasker & Co.....	Basin wastes.....	24 58
January .	26	Mt. Pleasant post-office.....	Postage.....	55 00
January .	27	Walter Dunham.....	Hay and straw.....	13 95
January .	28	J. C. Mathers.....	Repairing harness.....	1 50
January .	29	L. H. Fenton.....	Digging graves.....	14 50
January .	30	Millspaugh & Stearns.....	Buck mittens.....	13 50
January .	31	Rukgaber & Clarke.....	Hardware.....	27 40
January .	32	Rukgaber & Clarke.....	Hardware, ventilating pipes, etc.....	449 50
January .	33	H. T. Bird.....	Medical supplies.....	95 45
January .	34	Farmers' Co-operative Store.....	Turkeys, chickens, butter, etc.....	254 66
January .	35	A. Kammerer.....	Hops.....	3 75
January .	36	A. Gensel & Co.....	Fuel.....	4 00
January .	37	E. L. Penn.....	Dry goods.....	21 47
January .	38	Ketcham, Officer & Co.....	Breadstuffs and bran.....	484 49
January .	39	B. H. Crane.....	Hardware and queensware.....	43 16
January .	40	W. J. Parker.....	Ticking, braid and thread.....	33 95
January .	41	A. E. Virden.....	Butter.....	24 16
January .	42	Bowman & Kaufman.....	Coal.....	35 84
January .	43	G. A. Talley.....	Repairs on wagons, etc.....	13 00
January .	44	Edward Martin.....	Return of patient.....	5 00
January .	45	A. Cormick.....	Straw.....	10 31
January .	46	A. O. Devol & Co.....	Boots, shoes, and slippers.....	58 70
January .	47	P. Summers.....	Codfish, butter, eggs, etc.....	312 98
January .	48	E. L. Penn & Co.....	Shoes and slippers.....	471 32
January .	49	H. N. Crane.....	Stationery.....	52 65
January .	50	Auten & Andrews.....	Coal.....	234 00
January .	51	Frank Hobart.....	Brooms.....	32 00
January .	52	P. T. Twinting.....	Sugar, beans, butter, etc.....	144 52
January .	53	Geo. A. Talley.....	Difference on wagon exchange.....	20 00
January .	54	C. Hurley.....	Sugar and wood.....	43 75
January .	55	Robt. Ansell.....	Straw.....	15 03
January .	56	Garlick, Waters & Co.....	Jeans, flannel, mittens, etc.....	181 01
January .	57	Geo. A. Martin.....	Straw.....	31 01

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Varrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
January	58	J. A. Retherney.	Eight steers	427 40
January	59	Mt. Pleasant Gas Works	Lights.	478 80
January	60	Edwin Van Nieu	Interest on loan to treasurer	11 20
January	61		Two barrels evergreens.	5 00
January	62		One boar pig	10 00
January	63	T. Irons	Returning patient	5 00
January	64	William Edgar.	Straw	24 94
January	65	M. W. Farber	Hogsheads, lard tierces	45 00
January	66	John Wiley & Son	Library	26 88
January	67	William Blom	Caustic soda.	46 28
January	68	Hunter Bros.	Clothing.	28 00
January		Campbell.	Butter and cheese	249 90
January		lecker.	Straw	36 41
January		Phillips.	Wheelbarrow	5 50
January		Cornick	Straw	8 61
January		Henderson.	Current expense—petty account.	126 58
January			C., B. & Q. R. R.	503 83
January		employees.	Salaries and wages.	1775 30
January		employees	Salaries and wages.	738 91
January		workers	Salaries and wages.	506 62
February.		Leiter & Co	Blankets	437 76
February.		rant	Bran	104 00
February.	3	T. W. Barhydt & Co	Boots and shoes	66 85
February.	4	C. H. Peters.	Manure.	15 00
February.	5	D. L. Moore.	Horseshoes	19 70
February.	6	A. O. Devol & Co	and repairs.	74 96
February.	7	R. C. Wells		10 60

February.	8 S. N. Thompson & Co.	Queensware	4 30
February.	9 Wm. Timmerman & Co.	Shoes and slippers	11 56
February.	10 W. J. Parker	Dry goods	77 40
February.	11 T. Miltonberger & Co.	Clothing	68 25
February.			77 00
February.			2 94
February.			65 00
February.			10 30
February.			10 00
February.			6 18
February.			814 94
February.			96 23
February.			850 00
February.			107 30
February.			272 57
February.			56 70
February.			141 02
February.			45 85
February.			18 00
February.			6 70
February.			1 70
February.			15 60
February.			87 17
February.			40 62
February.			5 54
February.			33 10
February.			7 00
February.			419 10
February.			2 63
February.			2 00
February.			60 50
February.			7 00
February.			8 21
February.			20 00
February.			497 34
February.			16 15
February.			7 65
February.			13 85

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				\$
February.	46	G. A. Talley	Repairs on wagons	2 00
February.	47	L. T. Willard	Repairs on harness, etc	22 00
February.	48	A. Singer & Co.	Oysters and lemons.	4 80
February.	49	Sol. Hewitt	Chickens, codfish, and groceries	17 36
February.	50	Griffith, Burkett & Co.	Hardware	7 20
February.	51	A. Roper	do	351 58
February.	52	M. L. Edwards	arrants.	451 50
February.	53	Wm. M. Brown & Bro.	do	86 95
February.	54	Mt. Pleasant P. O.	do	72 60
February.	55	A. O. Devol & Co	do	89 80
February.	56	Farmers' Co-operative Store	gar, etc.	146 94
February.	57	B. T. Ross	do	6 80
February.	58	I. Phillips	buildings.	10 00
February.	59	H. T. Bird	do	93 20
February.		Gas Works	do	7 95
February.		ale Works	do	75 00
February.		licer & Co	do	380 02
February.		Gas Works	do	402 40
February.		do	do	16 00
February.		do	do	429 76
February.		do	do	100 00
February.		do	do	187 18
February.		es.	do	1718 49
February.		oyes	do	718 86
February.		em	do	408 40
March		ds.	uref.	48 87
March				168 73



March .....	3 H. B. Swan .....	616 50
March .....	4 L. H. Fenton .....	16 00
March .....	5 William Campbell .....	196 75
March .....	6 J. N. Dutton .....	420 80
March .....	7 L. Rabenstine .....	3 50
March .....	8 Charles Shubert .....	15 00
March .....	9 G. A. Talley .....	7 35
March .....	10 A. Roper .....	400 00
March .....	11 Edward R. Squibb .....	110 44
March .....	12 Filden & Co .....	32 37
March .....	13 Russell & Erwin M'f'g Co .....	24 62
March .....	14 Grannis & Farwell .....	182 68
March .....	15 W. M. Hoyt & Co .....	112 69
March .....	16 William T. Allen & Co .....	30 66
March .....	17 Union Foundry Works .....	67 53
March .....	18 Field, Leiter & Co .....	127 42
March .....	19 Sharp & Smith .....	18 00
March .....	20 J. P. Melcher .....	40 84
March .....	21 William Blom .....	105 00
March .....	22 Pilger Brothers .....	60 10
March .....	23 John H. Gear .....	189 18
March .....	24 Edward L. Wilson .....	4 50
March .....	25 John Rukgaber .....	629 46
March .....	26 William Campbell .....	11 71
March .....	27 Thomas Gibbin .....	861 87
March .....	.....	8 00
March .....	.....	8 48
March .....	.....	88 16
March .....	.....	201 26
March .....	.....	37 30
March .....	.....	160 00
March .....	.....	11 55
March .....	.....	41 47
March .....	.....	589 50
March .....	.....aph Co .....	5 86
March .....	.....	8 08
March .....	.....	102 37
March .....	.....	8 64

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
March ...	41	Henry C. Lea.....	Library.....	6 00
March ...	42	Beneman & Wilson .....	Library and diversions .....	218 80
March ...	43	Rukgaber & Clarke .....	Hardware and repairs .....	79 34
March ...	44	H. N. Crane .....	Stationery .....	80 08
March ...	45	Chas. Prince.....	Repairs on boiler .....	3 25
March ...	46	D. L. Morse.....	Horseshoeing.....	10 75
March ...	47	Geo. H. Spahr.....	Clothing .....	284 40
March ...	48	B. H. Crane.....	Hardware and repairs .....	80 80
March ...	49	Sol. Hewitt .....	Codfish, etc.....	7 85
March ...	50	E. L. Penn & Co.....	Shoes and slippers.....	158 74
March ...	51	R. Eshelman.....	Clothing .....	61 50
March ...	52	Spencer & Mahin.....	Potatoes .....	1 80
March ...	53	A. O. Devol & Co.....	Boots and repairs.....	2 80
March ...	54	N. Gensel & Co.....	Ice .....	4 00
March ...	55	Jno. Hanson.....	Brooms.....	87 50
March ...	56	Geo. W. McAdam.....	Printing .....	28 00
March ...	57	A.....	Oysters, lemons, apples .....	11 35
March ...	58	S. J.....	Lamp chimneys and pitchers .....	4 35
March ...	59	Mt.....	Box rent.....	2 00
March ...	60	Fa.....	Potatoes, butter, eggs, etc.....	101 02
March ...	61	E. L. Penn.....	Dry goods .....	44 69
March ...	62	W. J. Parker.....	Dry goods .....	32 25
March ...	63	Frank Hobart .....	Brooms.....	10 00
March ...	64	D. I. Holcomb .....	Queenware, glass, etc.....	163 60
March ...	65	Mt. Pleasant post-office.....	Postage.....	15 00
March ...	66	Mt. Pleasant Gas Works.....	Lights.....	390 20
March ...	67	P. Saunders & Son .....	Dry goods and furnishing.....	95 32

March ...	68 R. C. Wells.....	Horseshoeing.....	7 55
March ...	69 Ketcham, Officer & Co .....	Breadstuffs and bran .....	100 79
March ...	70 Zulm & Thomas .....	Repairs on wagons, etc.....	5 65
March ...	71 Mary Smith.....	Music .....	10 00
March ...	72 C., B. & Q. R. R .....	Freight.....	53 84
March ...	73 Male employees.....	Salaries and wages .....	1698 92
March ...	74 Female employees .....	Salaries and wages .....	723 33
March ...	75 Day laborers.....	Salaries and wages.....	418 25
March ...	76 Officers' salaries.....	Salaries .....	1530 00
April ...	1 Al Farris.....	Corn .....	5 15
April ...	2 C. Wedertz & Co.....	Ice .....	286 00
April ...	3 Daniel Campbell.....	Cheese.....	22 02
April ...	4 Newton Rogers.....	Straw .....	6 96
April ...	5 William Coppes.....	Corn.....	17 88
April ...	6 T. L. Roberts.....	Corn .....	8 45
April ...	7 L. Greyble .....	Corn.....	6 07
April ...	8 E. J. Gibbs.....	Corn .....	10 20
April ...	9 David Ewing .....	Wood.....	2 03
April ...	10 C. Brown.....	Corn .....	9 08
April ...	11 John Wiley & Sons.....	Library .....	115 50
April ...	12 Gould, Fisher & Wells.....	Coffee and sugar.....	251 14
April ...	13 Field, Leiter & Co .....	Dry goods .....	131 63
April ...	14 John Redfearn.....	Corn.....	37 97
April ...	15 J. S. Craig.....	Return of patient .....	2 00
April ...	16 J. J. Burge.....	Oats.....	45 31
April ...	17 L. H. Fenton .....	Graves dug, and pumping.....	18 00
April ...	18 W. J. Dougherty .....	Furniture, etc .....	262 90
April ...	19 Pott, Young & Co.....	Library .....	145 65
April ...	20 O. V. Stough.....	Music .....	64 00
April ...	21 M. F. Riordan .....	Interest on loan to treasurer.....	15 46
April ...	.....	James W. Greenfield.....	4 43
April ...	.....	Library and diversions.....	194 35
April ...	.....	Codfish, etc .....	33 73
April ...	.....	Making shirts .....	50 00
April ...	.....	Beans.....	8 25
April ...	.....	Manure.....	4 00
April ...	.....	Repairing wagons, etc .....	5 20
April ...	.....	Sawdust.....	7 00

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
April ....	30	D. B. Stevens .....	Brick.....	31 90
April ....	31	W. Bishop .....	Oats.....	11 88
April ....	32	Jno. H. Whiting .....	Interest on loan to treasurer.....	27 50
April ....	33	L. L. Mott Iron Works .....	Heaters and castings .....	5 60
April ....	34	Pancoast & Manle .....	Gas-fittings .....	26 61
April ....	35	Peter Henderson & Co. ....	Roots and seeds .....	6 08
April ....	36	Henry A. Dreer.....	Potato seed, etc.....	10 75
April ....	37	Bowen & Moore .....	Medical supplies.....	104 88
April ....	38	Edw'd R. Squibb.....	Medical supplies.....	16 93
April ....	39	Van Shaack, Stevenson & Co. ....	Medical supplies.....	87 13
April ....	40	Fieldhouse, Dutcher & Belden .....	Fittings .....	48 00
April ....	41	Wm. T. Allen & Co. ....	Sugar .....	86 69
April ....	42	Field, Leiter & Co. ....	Ticking.....	190 36
April ....	43	McNab & Johnston.....	Codfish .....	45 87
April ....	44	Donahue, McCosh & Co. ....	Cement.....	3 90
April ....	45	Peter Fawcett .....	Repairing boiler.....	26 17
April ....	46	Acres, Blackmar & Co. ....	Library.....	15 00
April ....	47	L. S. Kincaid.....	Visiting Committee .....	25 00
April ....	48	M. I. Edwards, Co. ....	Discount on State warrants.....	844 19
April ....			Library .....	159 85
April ....			Wood.....	958 84
April ....			Corn .....	31 42
April ....			Library .....	159 85
April ....			Sand .....	2 03
April ....		iam.....	Freight.....	99 78
April ....		l .....	Oats.....	61 48
April ....		ood & Co .....	Library .....	5 00

etc.....	692 57
.....	17 83
.....	353 32
7.....	99 03
.....	7 08
.....	102 05
vs.....	56 70
.....	31 90
.....	108 08
.....	107 53
.....	388 03
.....	12 50
.....	23 70
.....	8 00
.....	38 00
.....	4 50
.....	4 90
.....	87 30
.....	12 90
.....	7 00
.....	18 32
are.....	61 98
.....	9 25
.....	59 40
.....	33 30
.....	270 80
.....	4 88
8.....	11 05
.....	9 08
.....	33 90
.....	47 40
.....	125 95
.....	19 60
.....	77 30
.....	108 01
.....	25 64
etc.....	84 57
.....	75

April.....	57 Jno. H. Gear.....
April.....	58 Pilger Bros.....
April.....	59 W. M. Hoyt & Co.....
April.....	60 Field, Leiter & Co.....
April.....	61 Knowles, Cloyes & Co.....
April.....	62 G. C. Cook & Co.....
April.....	63 H. D. Ostermoor.....
April.....	64 Geo. H. Schafer & Co.....
April.....	65 Bicklen, Winzer & Co.....
April.....	66 Grannis & Farwell.....
April.....	67 P. Summers.....
April.....	68 William Campbell.....
April.....	69 P. Jericho.....
April.....	70 S. Harter.....
April.....	71 C. B. Eshelman.....
April.....	72 D. L. Morse.....
April.....	73 R. C. Wells.....
April.....	74 L. F. Willard.....
April.....	75 H. T. Bird.....
April.....	76 Geo. W. McAdam.....
April.....	77 McGregor & Baines.....
April.....	78 Rukgaber, McGregor & Baines.....
April.....	79 N. Giesel & Co.....
April.....	80 William Timmerman & Co.....
April.....	81 E. L. Penn & Co.....
April.....	82 Mt. Pleasant Gas Works.....
April.....	83 Frank Hobart.....
April.....	84 B. H. Crane.....
April.....	85 Tamplin Bros & Woods.....
April.....	86 [REDACTED] Store.....
April.....	87 [REDACTED] Store.....
April.....	88 [REDACTED] Store.....
April.....	89 H. N. Crane.....
April.....	90 L. W. Taylor.....
April.....	91 Wm. M. Schlick.....
April.....	92 P. T. Twinting & Son.....
April.....	93 P. T. Twinting.....
April.....	94 Jno. G. Budde.....

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
April ....	95	Ketcham, Officer & Co .....	.....	477 11
April ....	96	Royce & Hopping .....	etc .....	111 00
April ....	97	Bowman & Kaufman .....	.....	56 47
April ....	98	J. W. Henderson .....	expense .....	80 57
April ....	99	C., B. & Q. R. Co .....	.....	216 37
April ....	100	Male employees .....	.....	1547 72
April ....	101	Female employees .....	.....	000 37
April ....	102	Day laborers .....	.....	413 06
May ....	1	Robert S. Gills .....	.....	48 12
May ....	2	Mrs. E. M. Elliott .....	.....	10 26
May ....	3	Thomas Hollowell .....	.....	7 21
May ....	4	Emma Keelson .....	.....	1 60
May ....	5	Virden & Gilluspy .....	.....	14 04
May ....	6	Ross Virden .....	.....	7 00
May ....	7	William M. Brown & Bros. ....	.....	286 40
May ....	8	W. L. Phillips .....	agents .....	12 65
May ....	9	T. C. Alberson .....	.....	612 40
May ....	10	J. W. Baker .....	.....	4 70
May ....	11	George Simmons .....	.....	12 70
May ....	12	C. Bechler .....	.....	48 07
May ....	13	E. Stevens .....	.....	10 25
May ....	14	S. G. Heimbaugh .....	.....	3 01
May ....	15	L. H. Fenton .....	mping .....	10 00
May ....	16	T. E. Stevens .....	.....	58 05
May ....	17	Abrahamson & Swan .....	.....	22 80
May ....	18	William Campbell .....	.....	46 56
May ....	19	Milwaukee Cement Co .....	.....	33 00

May	20 Hawk-Eye Publishing Co.	13 00
May	21 T. W. Fawcett.	20 00
May	22 E. Baines.	26 16
May	23 W. Bishop	11 25
May	24 Perry Morrison	8 20
May	25 Geo. Simmons	18 00
May	26 R. & J. Beck.	9 00
May	27 H. M. Bassett.	129 75
May	28 William Campbell	46 70
May	29 D. L. Morse.	7 70
May	30 R. C. Wells.	1 25
May	31 Farm Store	491 83
May	32 Mt. Pleasant	280 80
May	33 P. T.	127 48
May	34 Ketcham, Officer & Co	167 49
May	35 Humphrey & Eshelman.	39 75
May	36 Wm. Timmerman & Co.	74 70
May	37 Zubn & Thomas	8 15
May	38 Wm. M. Brown & Bros	112 40
May	39 T. Miltonberger & Co.	88 50
May	40 H. N. Crane.	21 90
May		109 39
May		36 25
May		39 90
May		14 00
May		366 40
May		1507 92
May		682 41
May		444 34
June.		1852 96
June.	od	18 12
June.	o.	10 95
June.		96 42
June.		504 00
June.	ls.	9 65
June.		45 88
June.		24 25
June.		73 68

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				\$
June....	10	Pilger Bros.....	Coffee and soda.....	69 80
June....	11	John H. Gear.....	Coffee, sugar, and syrup, etc.....	168 94
June....	12	".....	Linseed oil.....	27 05
June....	13	".....	Medical supplies.....	123 18
June....	14	Co.....	Locks, shears, and scissors.....	12 93
June....	15	".....	Cattle.....	161 25
June....	16	".....	Butter jars.....	69 00
June....	17	John Rukgaber.....	Flagging.....	44 40
June....	18	M. L. Edwards.....	Commission as treasurer.....	161 38
June....	19	T. E. Paine & Co.....	Butter and potatoes.....	141 22
June....	20	L. H. Fenton.....	Digging graves.....	21 00
June....	21	S. G. Heimbaugh.....	Eggs.....	1 45
June....	22	T. C. Albertson.....	Cattle.....	150 75
June....	23	John Sanquist.....	Cutting cloth for suits.....	9 00
June....	24	A. Kammerer.....	Hops.....	7 60
June....	25	Mount Pleasant post-office.....	Postage and envelops.....	177 40
June....	26	H. B. Swan.....	Sheep.....	21 90
June....		".....	Road rock.....	48 12
June....		".....	Farm machinery.....	28 50
June....		".....	Repairs on wagons, etc.....	4 10
June....		".....	Sorrel horse.....	75 00
June....		".....	Cattle.....	854 80
June....		".....	Wood.....	38 59
June....		".....	Hauling coal.....	7 50
June....		".....	Butter.....	80 17
June....		".....	Medical supplies.....	21 70
June....		Co.....	Gaiters and slippers.....	4 50



June.....	87 Mt. Pleasant Gas Works.....	Lights.....	197 60
June.....	88 S. L. Kincaid.....	Visiting Committee.....	22 00
June.....	89 Jno. Redfern.....	Corn and oats.....	65 47
June.....	90 Emily Chalfant.....	Fruit.....	5 25
June.....	91 Jno. H. Gear.....	Sugar.....	564 03
June.....		Medical supplies.....	50 74
June.....		Farina and soda crackers.....	9 13
June.....		Rice.....	17 54
June.....	& Co.....	Glass.....	4 80
June.....		Coffee.....	105 16
June.....		Barrow wheel.....	4 80
June.....		.....	49 50
June.....	49 Field, Leiter & Co.....	..... and handkerchiefs.....	524 80
June.....	50 William Blom.....	.....	60 00
June.....	51 Iowa State Register.....	.....	19 50
June.....	52 T. S. & A. J. Kirkwood.....	.....	33 64
June.....	53 Pilger Bros.....	.....	18 39
June.....	54 Edward R. Squibb.....	.....	259 09
June.....	55 Jno. M. Maris & Co.....	.....	9 20
June.....	56 Auten & Andrews.....	Coal.....	150 00
June.....	57 I.....	Stationery.....	14 85
June.....	58 I.....	Hats.....	8 50
June.....	59 I.....	Medical supplies.....	18 75
June.....	60 I.....	Stationery.....	8 75
June.....	61 I.....	Clothing.....	13 80
June.....	62 I.....	Clothing.....	286 90
June.....	63 I.....	Hardware and tinware.....	71 49
June.....	64 I.....	Clothing.....	71 45
June.....	65 D. I. Holcomb.....	Queenware and glassware.....	20 20
June.....	66 P. T. Twinting.....	Butter, codfish, etc.....	83 72
June.....	67 Farmers' Co-operative Store.....	Butter, eggs, etc.....	261 22
June.....	68 Wm. H. Schliep.....	Tobacco.....	31 25
June.....	69 B. H. Crane.....	Hardware and repairs.....	30 30
June.....	70 S. Harter.....	Repairing wagons, etc.....	26 30
June.....	71 P. Jericho.....	Repairing mattresses, etc.....	12 30
June.....	72 Ketcham, Officer & Co.....	Breadstuffs and bran.....	749 02
June.....	73 Bowman & Kauffman.....	Coal.....	37 91
June.....	74 Templin Bros. & Woods.....	Dry goods.....	4 35

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
June.....	75	Lehew & McKibben .....	Butter.....	23 02
June.....	76	Geo. L. Talbot .....	Boots, shoes, and repairs.....	21 65
June.....	77	L. F. Willard .....	Repairing harness .....	10 95
June.....	78	R. Eshelman .....	Clothing.....	25 00
June.....	79	Geo. W. McAdam .....	Paver and printing .....	8 50
June.....	80	D. L. Morse.....	.....	1 40
June.....	81	H. L. Phillips .....	.....	1 45
June.....	82	R. C. Wells.....	.....	1 35
June.....	83	P. Summers.....	.....	571 70
June.....	84	McAdam Bros.....	.....	12 00
June.....	85	L. W .....	.....	26 00
June.....	86	P. T. .....	.....	10 20
June.....	87	Shiel .....	.....	24 00
June.....	88	G. B. Brooks.....	.....	5 36
June.....	89	Schafer & Hofman.....	.....	174 80
June.....	90	Hawk-Eye Publishing Co.....	.....	13 00
June.....	91	C., B. & Q. R. R.....	.....	102 18
June.....	92	Male employees.....	.....	1505 11
June.....	93	Female employees.....	.....	676 67
June.....	94	Day laborers.....	.....	580 62
June.....	95	Officers' salaries.....	.....	1650 00
July.....	1	William Campbell .....	.....	6 55
July.....	2	J. P. Bangham .....	.....	3 00
July.....	3	W. A. Cobb .....	.....	11 64
July.....	4	Frank Hobart .....	.....	5 00
July.....	5	Ned Burns.....	.....	1 00
July.....	6	Wm. M. Brown & Bro.....	.....	167 22

July	7	W. E. McCoy	reassurer.	61 48
July	8	William Burns	reassurer.	13 24
July	9	W. A. Cobb	reassurer.	8 60
July	10	Geo. Cobb	reassurer.	80 52
July	11	L. H. Fenton	reassurer.	21 50
July	12	Vancise & Throop	reassurer.	42 20
July	13	John Rukgaber	reassurer.	35 22
July	14	J. P. W. Jenkins	reassurer.	10 28
July	15	Daniel Risser, Sr.	reassurer.	171 00
July	16	Chas. Orr	reassurer.	6 68
July	17	J. W. Williams	reassurer.	12 70
July	18	H. M. Bassett	reassurer.	58 20
July	19	W. P. Saunders	reassurer.	3 00
July	20	A. Baxter	reassurer.	5 00
July	21	C. B. & Q. R. R.	reassurer.	48 72
July	22	B. C. R. & N. R. R.	reassurer.	278 40
July	23	B. C. R. & N. R. R.	reassurer.	38 40
July	24	C. B. & Q. R. R.	reassurer.	6 72
July	25	John Redfean	reassurer.	35 08
July	26	T. W. Fawcett	reassurer.	18 00
July	27	Garlick, Waters & Co	reassurer.	8 75
July	28	Thos. Giblin	reassurer.	3 01
July	29	T. V. Taft	reassurer.	6 91
July	30	M. L. Edwards	reassurer.	176 62
July	31	Wm. M. Warwick	reassurer.	3 50
July	32	R. M. Martin	reassurer.	11 48
July	33	Edward R. Smith	reassurer.	137 74
July	34		reassurer.	24 17
July	35		reassurer.	45 00
July	36	C. B. & Q. R. R.	reassurer.	27 55
July	37	H. A. Zuhn	reassurer.	2 90
July	38	Geo. A. Talley	reassurer.	8 10
July	39	S. Harter	reassurer.	10 26
July	40	L. F. Willard	reassurer.	3 75
July	41	B. H. Crane	reassurer.	8 95
July	42	Farmers' Co-operative Store	reassurer.	81 85
July	43	Humphrey & Eshelman	reassurer.	26 50
July	44	Rukgaber, McGregor & B	reassurer.	19 80

## EXPENDITURES--CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
July .....	45	Mrs. E. M. Elliott .....	Bonnets .....	\$ 6 00
July .....	46	Geo. W. McAdam .....	Printing .....	18 00
July .....	47	Mt. Pleasant post-office .....	Stamps .....	6 00
July .....	48	Mt. Pleasant Gas Works .....	Lights .....	152 40
July .....	49	Geo. H. Spahr .....	Clothing .....	104 95
July .....	50	Geo. L. Talbot .....	Boots and slippers .....	5 80
July .....	51	C. B. Eshelman .....	Clothing .....	47 00
July .....	52	P. Summers .....	Flour, potatoes, and eggs .....	65 20
July .....	53	H. T. Bird .....	Medical supplies .....	8 20
July .....	54	Wm. H. Schliep .....	Tobacco .....	10 25
July .....	55	R. Eshelman .....	Clothing .....	44 00
July .....	56	Robinson Bros .....	Dry goods .....	21 68
July .....		oda .....	Dry goods .....	8 00
July .....			Furniture .....	21 25
July .....			Medical supplies .....	7 00
July .....			Sorghum, potatoes, eggs, etc .....	13 88
July .....			Repairs .....	19 64
July .....			Coal .....	15 58
July .....			Lumber .....	18 75
July .....	63	P. T. Twinting .....	Breadstuffs and bran .....	51 80
July .....	64	Ketcham, Officer & Co .....	Salaries and wages .....	1522 96
July .....	65	Male employees .....	Salaries and wages .....	606 40
July .....	66	Female employees .....	Salaries and wages .....	527 79
July .....	67	Day laborers .....	Return of patient .....	7 45
August ..	1	Geo. Beckelt .....	Fruit .....	1 64
August ..	2	J. B. Pearce .....	Return of patient .....	7 28
August ..	3	L. Ballentine .....	Lime .....	9 00
August ..	4	William Kean .....		



## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT
1878.				
August ..	43	Pilger Bros.....	.....	21 15
August ..	44	McNab & Johnston.....	.....	65 50
August ..	45	Fieldhouse, Dutcher & Belden.....	.....	37 46
August ..	46	"    M. D. ....	.....	128 19
August ..	47	"    Co.....	.....	76 45
August ..	48	"    son.....	.....	65 45
August ..	49	"    campus drus. & Woods.....	.....	69 78
August ..	50	S. & A. B. Saunders.....	.....	6 00
August ..	51	B. F. Ross.....	.....	36 82
August ..	52	Farmers' Co-operative Store.....	.....	92 83
August ..	53	D. L. Morse.....	.....	21 75
August ..	54	B. H. Crane.....	.....	23 55
August ..	55	Geo. L. Talbot.....	etc.....	9 00
August ..	56	Geo. H. Spahr.....	.....	18 75
August ..	57	R. C. Wells.....	.....	6 55
August ..	58	Chas. Snider & Co.....	.....	2 85
August ..	59	Mt. Pleasant Gas Works.....	.....	176 00
August ..	60	P. Summers.....	.....	157 84
August ..	61	Royce & Hopping.....	.....	6 35
August ..	62	Ketcham, Officer & Co.....	.....	26 78
August ..	63	S. Harter.....	.....	2 00
August ..	64	Rukgaber, McGregor & Co.....	c.....	57 70
August ..	65	P. Jericho.....	, etc.....	9 70
August ..	66	Geo. W. McAdam.....	ng.....	17 50
August ..	67	P. T. Twinting.....	.....	8 96
August ..	68	Mt. Pleasant P. O.....	.....	15 00
August ..	69	T. Miltonberger & Co.....	.....	31 00

August ..	Iman.....	52 20
August ..	.....	7 16
August ..	.....	6 50
August ..	Co .....	14 81
August ..	.....	5 74
August ..	.....	7 87
August ..	.....	104 50
August ..	.....	1 25
August ..	.....	71 38
August ..	or & Baines.....	191 20
August ..	.....	148 95
August ..	.....	1522 81
August ..	.....	654 14
August ..	.....	541 34
August ..	.....	10 00
Septemb'r	Eye.....	11 15
Septemb'r	.....	10 85
Septemb'r	.....	4 73
Septemb'r	.....	11 65
Septemb'r	.....	3 00
Septemb'r	.....	82 86
Septemb'r	.....	282 88
Septemb'r	to treasurer.....	6 00
Septemb'r	.....	2 10
Septemb'r	.....	43 50
Septemb'r	.....	15 00
Septemb'r	.....	5 68
Septemb'r	.....	6 23
Septemb'r	tee.....	22 00
Septemb'r	tee .....	18 00
Septemb'r	tee.....	38 20
Septemb'r	to treasurer .....	21 10
Septemb'r	.....	25 45
Septemb'r	etc.....	13 50
Septemb'r	.....	492 10
Septemb'r	to hospital .....	845 24
Septemb'r	to treasurer.....	12 45
Septemb'r	to treasurer: .....	85 55

## EXPENDITURES—CONTINUED.

DATE	No. Voucher and Warrant	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				\$
Septemb'r		L. Edwards.....	Commission as treasurer.....	164 98
Septemb'r		S. Bowers.....	Corn.....	10 56
Septemb'r		Des Courtney.....	Corn.....	22 35
Septemb'r		Wman & Kaufman.....	Coal.....	107 20
Septemb'r		Allison.....	Corn.....	3 80
Septemb'r		S. Bowers.....	Corn.....	5 22
Septemb'r		I. Thompson.....	Crockery.....	6 20
Septemb'r		ary Avery.....	Vinegar.....	6 00
Septemb'r		nny & Gladden.....	Farm machinery.....	19 00
Septemb'r		W. McAdam.....	Printing.....	18 00
Septemb'r		Pleasant post-office.....	Postage and envelopes.....	82 40
Septemb'r		n. M. Brown & Bros.....	Coal.....	379 24
Septemb'r		ld, Leiter & Co.....	Dry goods.....	309 81
Septemb'r		Rukgaber.....	Stone, coping, etc.....	205 35
Septemb'r		Mary Smith.....	Music.....	26 00
Septemb'r		P. T. Twinting & Son.....	Lumber.....	41 94
Septemb'r		A. Gruber.....	Making and dressing tools.....	39 95
Septemb'r		Wm. McKibben.....	Butter.....	9 20
Septemb'r		Risk & Bryan.....	Flour and bran.....	304 35
Septemb'r		Grannis & Farwell.....	Syrup.....	86 20
Septemb'r		Hawk-Fee Publishing Co.....	Exchanges.....	13 00
Septemb'r		Co.....	Coffee and sugar.....	257 11
Septemb'r		orks.....	Starch.....	5 60
Septemb'r		Vells.....	Stairway.....	214 10
Septemb'r		Co.....	Sugar.....	119 32
Septemb'r		orks.....	Medical supplies.....	25 45
Septemb'r			Brass tubes.....	272 00



Septemb'r	52 Russell & Erwin Manufacturing Co.	1	.....	31 12
Septemb'r	53 Edward R. Squibb	1	.....	124 18
Septemb'r	54 Bowen & Moore	1	.....	101 97
Septemb'r	55 J. A. Fay & Co.		Wood-working machinery	36 00
Septemb'r	56 Collier, Robertson & Hambleton		Coffee	108 64
Septemb'r	57 Ketchum, Officer & Co		Breadstuffs and bran	108 18
Septemb'r	58 Leedham & Baugh		Window sash	8 00
Septemb'r	59 P. T. Twinting		Ham, butter, eggs, etc.	68 21
Septemb'r	60 J. F. Sargent		Stationery	7 10
Septemb'r	61 George H. Spahr		Clothing	99 50
Septemb'r	62 Mt. Pleasant Gas Works		Lights	238 00
Septemb'r	63 Rukgaber, McGregor & Baines		Hardware and tinware	41 45
Septemb'r	64 Farmers' Co-operative Store		Sugar, butter, eggs, etc.	138 91
Septemb'r	65 Thomas Hollowell		Fruit	1 80
Septemb'r	66 J. W. Henderson		Current expense, petty account	196 51
Septemb'r	67 Freight		C., B. & Q. R. R.	173 67
Septemb'r	68 Male employees		Salaries and wages	1514 91
Septemb'r	69		Salaries and wages	651 68
Septemb'r	70		Salaries and wages	943 59
Septemb'r	71		Salaries	1650 00
October..	1 T. H. Antrobus		Corn	5 55
October..	2 J. E. Brown		Oats	18 37
October..	3 M. S. Bowers		Corn	5 44
October..	4 H. J. Spry		Corn	3 96
October..	5 J. M. Holland		Butter	3 00
October..	6 S. Hewitt		Eggs	4 50
October..	7 John Rukgaber		Flagging	615 30
October..	8 J. R. Pennington		Corn	4 41
October..	9 A. T. Lindley		Corn	4 85
October..	10 Frank Carmean		Corn	20 30
October..	11 W. E. Lyons		Corn	9 47
October..	12 Patrick O'Connor		Building stone	10 20
October..	13 William T. Allen & Co		Coffee	23 72
October..	14 Daniel Gavin		Corn	4 60
October..	15 H. Harrison		Sheep	173 64
October..	16 John Lynch		Corn	12 80
October..	17 John Hanson		Cattle	98 89
October..	18 H. W. Hanson		For lease of ground	78 00

EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				\$
October..	19	Thos. Lytle.....	Apples .....	19 25
October..	20	Lyman Cobb.....	Corn .....	19 90
October..	21	S. T. Hills.....	Cattle.....	282 18
October..	22	Jno. Gavin .....	Corn .....	5 45
October..	23	William Burns.....	Rock .....	10 62
October..	24	Fieldhouse, Dutcher & Belden .....	Flue cleaner.....	12 81
October..	25	Frank Carmean.....	Corn .....	17 10
October..	26	B. C. Kauffman .....	Molasses .....	395 67
October..	27	A. Foreman .....	Cattle .....	255 75
October..	28	Thos. Lytle.....	Apples .....	26 12
October..	29	James Wilson .....	Apples .....	14 40
October..	30	J. P. Bingham .....	Threshing grain.....	50 52
October..	31	Western Union Telegraph Co.....	Telegraphing .....	1 85
October..	32	Albert Wells.....	Apples.....	21 28
October..	33	W. A. Cobb .....	Macadamizing stone.....	13 56
October..	34	N. B. Andrews.....	Apples .....	6 81
October..	35	Patrick Gavin .....	Corn.....	5 37
October..	36	A. Foreman .....	Apples .....	13 75
October..	37	Thos. Lytle.....	Apples .....	31 89
October..	38	C. Bechler .....	Butter.....	141 60
October..	39	P. Summers.....	Flour, butter, eggs, etc.....	160 01
October..	40	T. H. Nevin & Co.....	Putty .....	4 50
October..	41	McNab & Johnston.....	Codfish .....	59 83
October..	42	L. Gould & Co.....	Clothes-baskets .....	9 00
October..	43	William Blom.....	Soap.....	60 00
October..	44	L. H. Dalhoff & Co.....	Suspenders and spectacles .....	20 25
October..	45	Pilger Bros.....	Groceries .....	183 18

October..	46 Sharp & Smith.....	Medical supplies.....	10 25
October..	47 G. C. Cook & Co.....	Tea.....	54 18
October..	48 S. Harter.....	.....	3 73
October..	49 R. C. Wells.....	.....	9 00
October..	50 Jno. W. Powell.....	.....	12 00
October..	51 W. F. Dougherty.....	.....	204 00
October..	52 Geo. H. Spahr.....	Clothing.....	116 75
October..	53 Mt. Pleasant post-office.....	Postage and envelopes.....	80 00
October..	54 Rukgaber, McGregor & Baines.....	Hardware, etc.....	99 54
October..	55 Templin Bros. & Woods.....	Dry goods.....	116 19
October..	56 B. F. Ross.....	Lumber.....	78 75
October..	57 Griffith, Burkett & Co.....	Hardware.....	18 20
October..	58 Mt. Pleasant Gas Works.....	Lights.....	364 80
October..	59 Chas. Snider & Co.....	Medical supplies.....	81 12
October..	60 I.....	Clothing.....	35 00
October..	61 I.....	Butter, eggs, etc.....	109 30
October..	62 L. F. Willard.....	Harness repairs.....	12 80
October..	63 B. H. Crane.....	Hardware, etc.....	27 73
October..	64 P. T. Twining.....	Butter, eggs, and fish.....	42 86
October..	65 H. N. Crane.....	Stationery.....	32 49
October..	66 G. A. Talley.....	Wagon repairs.....	20 70
October..	67 E. L. Penn & Co.....	Shoes and slippers.....	8 53
October..	68 Shields & Tomlinson.....	Flour.....	98 60
October..	69 J. R. Backus.....	Chickens, butter, and apples.....	16 56
October..	70 T. H. Garlick.....	Woolen mittens and caustic soda.....	23 20
October..	71 William M. Brown & Bros.....	Coal.....	273 05
October..	72 D. L. Moore.....	Horseshoeing.....	6 55
October..	73 Mary B. Smith.....	Music.....	8 00
October..	74 Ketcham, Officer & Co.....	Breadstuffs and bran.....	413 02
October..	75 C. B. & Q. R. R.....	Freight.....	113 86
October..	76 Male employees.....	Salaries and wages.....	1537 16
October..	77 Female employees.....	Salaries and wages.....	636 41
October..	.....	Salaries and wages.....	962 86
Novemb'r	.....	Apples.....	9 25
Novemb'r	.....	Apples.....	29 31
Novemb'r	.....	Apples.....	5 98
Novemb'r	.....	Corn.....	5 94
Novemb'r	.....	Corn.....	5 07

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
Novemb'r	6	Thos. Lytle .....	Apples .....	\$ 22 50
Novemb'r	7	A. B. Parrott. . . . .	Corn .....	5 48
Novemb'r	8	Thos. Powers .....	Wood .....	4 87
Novemb'r	9	Mrs. L. S. Kincaid .....	Visiting Committee .....	22 00
Novemb'r	10	Donahue & McCosh .....	Boiler materials .....	131 56
Novemb'r	11	Con. Gleason .....	Corn .....	5 20
Novemb'r	12	William Alter .....	Corn .....	4 69
Novemb'r	13	H. Pennebaker .....	Corn .....	4 48
Novemb'r	14	John Pennebaker .....	Corn .....	4 71
Novemb'r	15	J. E. Heston .....	Cider .....	4 10
Novemb'r	16	William Courtney .....	Corn .....	6 43
Novemb'r	17	William Grayble .....	Corn .....	4 20
Novemb'r	18	Con. Gleason .....	Corn .....	6 05
Novemb'r	19	Patrick Barry .....	Corn .....	5 00
Novemb'r	20	August Kudoby .....	Flour .....	44 00
Novemb'r	21	Frank Mathews .....	Cattle .....	309 33
Novemb'r	22	Robert Krause .....	Blankets and clothing .....	236 92
Novemb'r	23	Field, Leiter & Co. . . . .	Dry goods and clothing .....	1084 34
Novemb'r	24	B. F. Sterzing & Co .....	Ice .....	131 76
Novemb'r	25	August Kudoby .....	Bran .....	9 74
Novemb'r	26	Thomas Cadwell .....	Corn .....	4 45
Novemb'r	27	J. Pennebaker .....	Corn .....	4 82
Novemb'r	28	Thos. Gavin .....	Corn .....	10 65
Novemb'r	29	Wm. W. McKibben .....	Chickens and butter .....	61 80
Novemb'r	30	T. E. Stevens .....	Butter .....	44 60
Novemb'r	31	L. H. Fenton .....	Digging graves .....	6 50
Novemb'r	32	Patrick O'Connor .....	Macadamizing rock .....	120 60

Novemb'r	33 Daniel Gavin.....	5 28
Novemb'r	34 William Sullivan .....	4 60
Novemb'r	35 Jno. Bell.....	5 25
Novemb'r	36 Mrs. E. A. Rockhold .....	27 80
Novemb'r	37 R. Krause.....	92 50
Novemb'r	38 M. J. Taylor & Co.....	62 40
Novemb'r	39 Donahue & McCosh.....	12 62
Novemb'r	40 Geo. H. Schafer & Co.....	6 00
Novemb'r	41 McNab & Johnston .....	37 50
Novemb'r	42 Edward R. Squibb .....	89 86
Novemb'r	43 Cincinnati Electric and C. Light .....	1 20
Novemb'r	44 Mt. Pleasant post-office.....	82 00
Novemb'r	45 George Lake.....	26 68
Novemb'r	46 Thos. Gavin .....	10 26
Novemb'r	47 Jno. A. Sanquist.....	9 00
Novemb'r	48 Samuel Waters .....	343 70
Novemb'r	49 Thos. Sullivan .....	5 17
Novemb'r	50 Sam'l Baker.....	55 16
Novemb'r	51 Dan'l Risser, Sr .....	76 50
Novemb'r	52 Thos. Sullivan.....	5 02
Novemb'r	53 C. Hurley.....	16 80
Novemb'r	54 T. J. Price.....	346 40
Novemb'r	55 W. J. Hackney.....	9 86
Novemb'r	56 Jno. Bell.....	15 00
Novemb'r	57 American Journal of Insanity .....	10 00
Novemb'r	58 G. B. Brooks.....	5 07
Novemb'r	59 R. R. Grant.....	86 78
Novemb'r	60 Dan'l Gavin .....	6 42
Novemb'r	61 Western Union Tel. Co.....	1 50
Novemb'r	62 Z. R. Powell .....	5 60
Novemb'r	63 Jno. Bland.....	286 25
Novemb'r	64 G. C. Cook & Co.....	110 19
Novemb'r	65 Sharp & Smith.....	11 31
Novemb'r	66 Edward L. Wilson .....	7 00
Novemb'r	67 Peter Fawcett .....	20 00
Novemb'r	68 P. T. Twinting.....	8 50
Novemb'r	69 R. C. Wells.....	2 45
Novemb'r	70 D. L. Morse.....	5 25

## EXPENDITURES--CONTINUED.

DATE.	No. Voucher and Varrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
Novemb'r	71	L. Ketcham & Bros	Breadstuffs and bran	78 67
Novemb'r	72	Royce & Hopping	Hardware and repairs	543 00
Novemb'r	73	Sol Hewitt	Groceries	8 89
Novemb'r	74	Donahue & McCosh	Boiler material	331 98
Novemb'r	75	W. J. Parker	Dry goods	36 55
Novemb'r	76	B. F. Ross	Lumber	80 40
Novemb'r	77	Mt. Pleasant Gas Works	Lights	432 80
Novemb'r	78	C. A. Fallav	Repairs on wagons	12 80
Novemb'r	79	& Baines	Hardware, etc	46 95
Novemb'r	80		Wardrobes	150 00
Novemb'r	81	W. M. Schliep	Tobacco	6 75
Novemb'r	82	R. Eshelman	Clothing	28 95
Novemb'r	83	Humphrey & Eshelman	and eggs	2 50
Novemb'r	84	Farmers' Co-operative Store	m...	178 69
Novemb'r	85	John W. Powell	id slippers	2 20
Novemb'r	86	William Timmerman & Co	f...	34 70
Novemb'r	87	George H. Spahr	; and exchanges	68 85
Novemb'r	88	Mt. Pleasant Journal	f...	20 30
Novemb'r	89	T. Miltonberger & Co	and diversions	27 00
Novemb'r	90	Edward L. Wilson	on farm implements	286 70
Novemb'r	91	U. L. Phillips	supplies	3 50
Novemb'r	92	H. T. Bird	supplies	70 60
Novemb'r	93	Schafer & Hofman	t, exchange, and express	81 95
Novemb'r	94	James Frame	on loan to treasurer	142 96
Novemb'r	95	M. L. Edwards	Interest on loan to treasurer	217 65
Novemb'r	96	A. Roper		40 00
Novemb'r	97	T. V. Taft		11 50

Novemb'r	98	August Hall.....	Interest on loan to treasurer.....	24 60
Novemb'r	99	Freight.....	C., B. & Q. R. R.....	344 17
Novemb'r	100	Male employes.....	Salaries and wages.....	1395 64
Novemb'r	101	Female employes.....	Salaries and wages.....	642 41
Novemb'r	102	Day laborers.....	Salaries and wages.....	592 93
December	1	John W. Powell.....	Tools.....	20 00
December	2	Benj. King.....	Cattle.....	220 41
December	3	William Campbell.....	Cement.....	80 00
December	4	William Kneen.....	Buckwheat.....	4 00
December	5	Murray Iron Works.....	Repairs.....	8 65
December	6	T. S. & A. J. Kirkwood.....	Rawhide belt.....	12 33
December	7	Donahue & McCosh.....	Boiler material.....	198 31
December	8	A. M. Gilbert & Co.....	Truck.....	25 00
December	9	H. H. Reynolds.....	Hauling coal.....	1 25
December	10	Charles Prince.....	Repairs on washing-machine, etc.....	33 75
December	11	L. H. Fenton.....	Digging graves, and pumping.....	15 50
December	12	William M. Brown & Bros.....	Coal.....	561 92
December	13	C. A. Swan.....	Turkeys and chickens.....	7 92
December	14	John Gavin.....	.....	196 05
December	15	T. E. Stevens.....	.....	20 80
December	16	H. A. Zuhn.....	rs.....	10 85
December	17	T. Houck.....	and coopering.....	4 00
December	18	Nicholas Thill.....	.....	6 90
December	19	William Courtney.....	.....	5 70
December	20	J. N. Dutton.....	.....	748 00
December	21	Geo. Lake.....	.....	4 40
December	22	August Kudoby.....	.....	3 20
December	23	T. Houck.....	.....	5 77
December	24	Geo. Lake.....	.....	5 83
December	25	.....	.....	10 00
December	26	.....	.....	18 00
December	27	.....	.....	6 00
December	28	.....	.....	73 25
December	29	John Oaks.....	.....	3 05
December	30	Walter Dunham.....	.....	5 38
December	31	Penn & Holwick.....	Dry goods.....	14 51
December	32	E. L. Penn & Co.....	Shoes and repairs.....	91 70
December	33	John Bell.....	Turkeys.....	16 00

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1878.				
December	34	Western Union Tel. Co.	.....	1 00
December	35	O. V. Stough.....	.....	55 25
December	36	H. M. Bassett.....	.....	2 50
December	37	Jno. Kughaber.....	.....	90 66
December	38	Jno. Sanguist.....	.....	7 50
December	39	Royce & Hopping.....	and repairs .....	245 57
December	40	L. Ketcham & Bros.....	breadsturs and bran .....	50 26
December	41	D. I. Holcomb .....	Crockery and glassware.....	26 78
December	42	G. A. Talley.....	Livery, and wagon repairs.....	30 70
December	43	S. W. Garvin.....	Dry goods.....	14 17
December	44	Auten, Andrews & Co.....	Coal .....	60 66
December	45	Pancoast & Manle .....	Pipe, fittings, etc.....	193 15
December	46	M. J. Taylor & Co.....	Tobacco .....	20 80
December	47	Jno. Blane.....	Tea.....	92 97
December	48	William Blom .....	Soap and caustic soda.....	102 06
December	49	Clinton Wire Cloth Co.....	Window-guards .....	102 57
December	50	Fieldhouse, Dutcher & Belden .....	Valves, water-gauge, cocks, etc.....	31 96
December	51	Jno. H. Gear.....	Sugar and coffee.....	270 66
December	52	Geo. C. Cook & Co.....	Tea.....	120 00
December	53	McNab & Johnston .....	Fish.....	52 63
December	54	Crane Bros M'fg Co.....	Registers .....	48 02
December	55	Christian Mathes .....	Lard oil .....	30 87
December	56	Delahaye & Purdy.....	Medical supplies.....	53 50
December	57	Donahue & McCosh.....	Boiler material .....	48 96
December	58	Pilger Bros.....	Groceries.....	141 82
December	59	Ford Barnes, Sr. (deceased).....	Land rent.....	64 62
December	60	S. W. Garvin.....	By error, duplicate of No. 43.....	.....





EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
January .	12	L. W. Taylor.....	Flour.....	\$ 17 50
January .	13	T. E. Stevens.....	Butter.....	12 70
January .	14	H. H. Reynolds.....	Hauling coal.....	6 85
January .	15	Harry Lathrop.....	Hauling coal.....	8 71
January .	16	L. H. Fenton.....	Hauling, and grave digging.....	5 50
January .	17	H. H. Reynolds.....	Hauling coal.....	4 61
January .	18	T. W. Fawcett.....	Visiting Committee.....	18 00
January .	19	B. C. Chandler.....	Wood.....	6 00
January .	20	L. H. Dalhoff & Co.....	Suspenders.....	12 00
January .	21	Geo. H. Schafer & Co.....	Medical supplies.....	12 75
January .	22	Jno. Wiley & Sons.....	Library.....	7 00
January .	23	Edward R. Squibb.....	Medical supplies.....	207 81
January .	24	E. B. Oren.....	Wood.....	6 75
January .	25	Tribune Co., Chicago.....	Library and diversions.....	14 50
January .	26	Harry Lathrop.....	Hauling coal.....	2 54
January .	27	R. R. Grant.....	Hogs.....	178 83
January .	28	Lou. Fasold.....	Removal of patient.....	20 65
January .	29	C. F. Spearman.....	Corn.....	78 20
January .	30	W. A. Cobb.....	Coal hauling.....	2 29
January .	31	William Fullerton.....	Straw.....	1 92
January .	32	Jno. Rukgaber.....	Macadamizing and flagging stone.....	647 23
January .	33	J. W. Keeler.....	Clothing.....	7 25
January .	34	H. M. Bassett.....	Removal of patient.....	14 47
January .	35	Iowa State Register.....	Exchanges.....	18 20
January .	36	Henry C. Lea.....	Library and diversions.....	6 00
January .	37	James Frame.....	Coal.....	534 55
January .	38	Jno. Rukgaber.....	Flagging.....	269 83

January .	39 Shields & Tomlinson .	80 00
January .	40 Emily Chalfant .	32 98
January .	41 William M. Brown & Bros .	379 14
January .	42 Royce & Hopping .	38 59
January .	43 Western Union Telegraph Co .	2 73
January .	44 John McLaughlin .	19 24
January .	45 Shelby Grim .	2 48
January .	46 Thornton Willets .	1 20
January .	47 Smith & Hagans .	2 25
January .	48 Frederic Coal Mining Co .	19 42
January .	49 Griffith, Burket & Co .	9 70
January .	50 Charles Snider & Co .	7 75
January .	51 Mt. Pleasant Gas Works .	239 10
January .	52 Thomas Lash .	6 00
January .	53 L. Ketcham & Bros .	439 55
January .	54 F. E. Hobart .	7 25
January .	55 William Timmerman & Co .	6 50
January .	56 P. Jericho .	24 00
January .	57 Newbold & Houseman .	14 45
January .	58 H. T. Bird .	66 00
January .	59 B. H. Crane .	16 65
January .	60 Humphrey & Eshelman .	34 40
January .	61 B. F. Ross .	54 20
January .	62 Templin Bros & Woods .	12 51
January .	63 P. C. Tiffany .	7 80
January .	64 Vancise & Throop .	12 20
January .	65 E. L. Penn & Holwick .	15 82
January .	66 G. H. Spahr .	53 00
January .	67 T. Miltonberger & Co .	32 85
January .	68 D. I. Holcomb .	5 95
January .	69 B. F. Ross .	486 62
January .	70 F. Summers .	29 70
January .	71 W. H. Byrum .	1 60
January .	72 A. Kudoby & Co .	40 00
January .	73 Van Cise & Co .	6 40
January .	74 G. A. Talley .	12 35
January .	75 D. L. Moore .	7 00
January .	76 Sol Cavenee .	2 70

Crucery and glassware.  
Lumber .

## EXPENDITURES—CONTINUED.

DATE	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
January	77	R. C. Wells	Horseshoeing.	\$ 6 10
January	78	Schafer & Hoffman	Medical supplies.	49 40
January	79	Andrew Gruber.	Dressing tools	19 85
January	80	Egbert, Fidler & Chambers.	Library	162 60
January	81	H. P. Stanley's Sons.	Fruit.	4 75
January	82	John A. Grant.	Bran	56 25
January	83	J. W. Williams	Removing patient	11 81
January	84	C., B. & Q. R. R.	Freight.	1188 71
January	85	Male employees.	Salaries and wages.	1437 81
January	86	Female employees.	Salaries and wages.	656 34
January	87	Day laborers.	Salaries and wages.	710 07
February	1	C. P. Squires & Co.	Medical supplies.	10 06
February	2	Donahue & McCosh.	Botler material.	5 50
February	3	Field, Leiter & Co	Dry goods and furnishing.	45 96
February	4	William Blom	Soap.	52 00
February	5	G. C. Cook & Co.	Tea.	84 65
February	6	W. S. Courtney.	Vinegar	7 40
February	7	Wm. Russell.	Sheep.	68 48
February	8	Wm. Russell.	Hogs	116 96
February	9	L. H. Fenton.	Labor	17 00
February	10		Hauling ice.	1 25
February	11		Straw	12 70
February	12		Straw	13 82
February	13		Harness repairs.	12 50
February	14	Mt. Pleasant post-office	Postage.	32 00
February	15	Nelson Andrews.	Butter.	5 10
February	16	Mary B. Smith.	Music	4 00



## EXPENDITURES—CONTINUED.

DATE	No. Voucher and Warrant	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
February.	55	B. F. Ross & Bros.	Lumber	\$ 51 80
February.	56	Wm. Timmerman & Co.	Slippers	3 85
February.	57	B. H. Crane.	Hardware and tinware	5 15
February.	58	Newbold & Houseman.	Sugar and eggs	25 45
February.	59	Mt. Pleasant Gas Works	Gas fixtures	10 50
February.	60	Mt. Pleasant Gas Works	Lights.	323 40
February.	61	H. T. Bird	Medical supplies.	3 94
February.	62	Geo. H. Spahr.	Clothing	25 85
February.	63	J. G. Budde.	Lemons and oysters.	7 40
February.	64	S. & A. B. Saunders.	Dry goods	21 97
February.	65	H. A. Zulm.	Repairs on wagons, etc.	8 25
February.	66	Rukgaber, McGregor & Baines.	Repairing roof, etc.	17 43
February.	67	Patrick O'Connor.	Stone	6 05
February.	68	Jno. Lee.	Vinegar	13 23
February.	69	Rukgaber, McGregor & Baines.	Gas tank, furnishing, etc.	53 97
February.	70	C. B. Eshelman	Clothing	24 00
February.	71	Royce & Hopping.	Repairs, etc.	14 75
February.	72	R. Eshelman.	Clothing	51 25
February.	73	James Fuma	Coal	154 52
February.	74	C. B. "	Freight.	274 02
February.	75	Male "	Salaries and wages.	1234 25
February.	76	Female employees	Salaries and wages.	1848 37
February.	77	Day laborers.	Salaries and wages.	521 54
March ...	1	Wm. M. Brown & Bro.	Coal	493 50
March ...	2	Griffith, Burkett & Co.	Hardware	5 20
March ...	8	L. H. Fenton	Labor	26 02
March ...	4	Mary B. Smith.	Music	4 00



## EXPENDITURES--CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
March ..		.....	.....	140 08
March ..		.....	.....	20 00
March ..		.....	.....	28 70
March ..		.....	.....	62 47
March ..		.....	.....	7 70
March ..		.....	.....	32 47
March ..		.....	.....	108 57
March ..		Belden .....	.....	45 60
March ..		.....	.....	30 00
March ..		.....	.....	39 95
March ..		.....	Oran .....	512 50
March ..		.....	.....	9 95
March ..		.....	.....	18 00
March ..		.....	.....	6 25
March ..		.....	repairs.....	57 85
March ..		.....	.....	118 40
March ..		.....	.....	309 60
March ..		.....	.....	16 40
March ..		.....	.....	2 10
March ..		.....	.....	8 90
March ..		.....	.....	15 00
March ..		.....	.....	5 00
March ..		.....	.....	1 00
March ..		.....	.....	149 60
March ..		.....	.....	1290 04
March ..	66	C., B. & Q. R. R. ....	.....	635 48
March ..	67	Male employees.....	.....	292 08
March ..	68	Female employees .....	.....	
March ..	69	Day laborers.....	.....	





EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
April . . .	38	U. L. Phillips . . . . .	Repairs . . . . .	\$ 2 00
April . . .	39	James Sturgis . . . . .	Manure . . . . .	4 50
April . . .	40	T. E. Stevens . . . . .	Butter . . . . .	11 39
April . . .	41	B. C. Kauffman . . . . .	Sorghum . . . . .	33 69
April . . .	42	A. Kudoby & Co. . . . .	Bran . . . . .	5 91
April . . .	43	A. W. Faulkner . . . . .	Sawdust . . . . .	2 00
April . . .	44	H. T. Bird . . . . .	Furniture . . . . .	4 50
April . . .	45	C. P. Squires & Co. . . . .	Medical supplies . . . . .	21 65
April . . .	46	Acres, Blackmar & Co. . . . .	Library . . . . .	15 00
April . . .	47	Donahue & McCosh . . . . .	Boiler iron . . . . .	5 22
April . . .	48	John Blane . . . . .	Tea . . . . .	53 91
April . . .	49	Donahue, McCosh & Co. . . . .	Lime . . . . .	34 00
April . . .	50	Pilger Bros. . . . .	Soda . . . . .	3 30
April . . .	51	Geo. H. Schafer & Co. . . . .	Medical supplies . . . . .	23 75
April . . .	52	J. M. W. Jones . . . . .	Stationery . . . . .	3 00
April . . .	53	Fieldhouse, Dutcher & Belden . . . . .	Fittings . . . . .	39 30
April . . .	54	H. N. Crane . . . . .	Library . . . . .	39 44
April . . .	55	B. F. Ross & Bros. . . . .	Lumber . . . . .	322 24
April . . .	56	Mt. Pleasant Journal . . . . .	Printing . . . . .	12 00
April . . .	57	G. H. Gening & Son . . . . .	Medical supplies . . . . .	3 00
April . . .	58	G. C. Cook & Co. . . . .	Sugar . . . . .	112 66
April . . .	59	J. J. Bailey & Co. . . . .	Hanhkerchiefs . . . . .	9 69
April . . .	60	William McCully & Co. . . . .	Glass . . . . .	110 16
April . . .	61	Edward R. Squibb . . . . .	Medical supplies . . . . .	192 89
April . . .	62	William M. Brown & Bros . . . . .	Coal . . . . .	97 47
April . . .	63	S. Harter . . . . .	Wagon repairs . . . . .	8 75
April . . .	64	P. Summers . . . . .	Butter, eggs, etc. . . . .	64 55

5 20  
4 30  
3 20  
16 00  
5 70  
52 17  
227 10  
49 67  
9 00  
10 50  
22 00  
7 34  
4 30  
31 09  
53 02  
9 60  
39 53  
23 71  
1 72  
4 75  
53 25  
2 40  
6 50  
43 56  
90 00  
142 50  
21 46  
74 69  
2 10  
9 93  
8 83  
1 50  
2 15  
9 90  
65 38  
1325 68  
600 23  
488 86

April . . .	65	G. E. Smith . . . . .	Medical supplies . . . . .	
April . . .	66	Sol Hewitt . . . . .	Furnishing . . . . .	
April . . .	67	W. J. Parker . . . . .	Dry goods . . . . .	
April . . .	68	G. H. Spahr . . . . .	Clothing . . . . .	
April . . .	69	E. L. Penn & Co . . . . .	Boots, shoes, repairs, etc . . . . .	
April . . .	70	E. L. Penn & Holwick . . . . .	Dry goods . . . . .	
April . . .	71	Mt. Pleasant Gas Works . . . . .	Lights . . . . .	
April . . .	72	Rukgaber, McGregor & Baines . . . . .	Hardware, etc . . . . .	
April . . .	73	Howe & Sutton . . . . .	Eggs . . . . .	
April . . .	74	P. Jericho . . . . .	Plastering hair . . . . .	
April . . .	75	L. S. Kincaid . . . . .	Visiting Committee . . . . .	
April . . .	76	B. H. Crane . . . . .	Hardware and repairs . . . . .	
April . . .	77	William Timmerman & Co . . . . .	Slippers . . . . .	
April . . .	78	Royce & Hopping . . . . .	Sash-guards, etc . . . . .	
April . . .	79	L. Ketcham & Bros . . . . .	Breadstuffs and bran . . . . .	
April . . .	80	L. P. Willard . . . . .	Harness repairs . . . . .	
April . . .	81	P. T. Twinting . . . . .	Flour, eggs, etc . . . . .	
April . . .	82	H. Fuller . . . . .	Butter and eggs . . . . .	
April . . .	83	S. & A. B. Saunders . . . . .	Dry goods . . . . .	
April . . .	84	Charles Prince . . . . .	Labor . . . . .	
April . . .	85	T. Miltonberger & Co . . . . .	Clothing . . . . .	
April . . .	86	R. C. Wells . . . . .	Horseshoeing . . . . .	
April . . .	87	D. L. Moore . . . . .	Horseshoeing . . . . .	
April . . .	88	A. Kudoby & Co . . . . .	Flour . . . . .	
April . . .	89	Thomas Knox . . . . .	One horse . . . . .	
April . . .	90	Daniel Risser, Sr. . . . .	Slippers . . . . .	
April . . .	91	Farwell, Miller & Co . . . . .	Coffee . . . . .	
April . . .	92	Russell & Erwin Manufacturing Co . . . . .	Locks, etc . . . . .	
April . . .	93	Griffith, Burkett & Co . . . . .	Hardware . . . . .	
April . . .	94	Templin Bros & Woods . . . . .	Dry goods . . . . .	
April . . .	95	S. N. Thompson . . . . .	Crockery and glassware . . . . .	
April . . .	96	Nelson Andrews . . . . .	Butter . . . . .	
April . . .	97	George L. Talbot . . . . .	Slippers and repairs . . . . .	
April . . .	98	H. T. Bird & Co . . . . .	Medical supplies . . . . .	
April . . .	99	C. B. & Q. R. R . . . . .	Freight . . . . .	
April . . .	100	Male employees . . . . .	Salaries and wages . . . . .	
April . . .	101	Female employees . . . . .	Salaries and wages . . . . .	
April . . .	102	Day laborers . . . . .	Salaries and wages . . . . .	

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				\$
May .....		State Laundry Co. ....	Mangle cloth .....	12 00
May .....		Putnam's Sons .....	Library .....	10 30
May .....		Leiter & Co. ....	Dry goods .....	2 54
May .....		Fenton .....	Labor .....	12 50
May .....		chler .....	Butter .....	7 70
May .....	6	Van Schaack, Stevenson & Co .....	Medical supplies .....	1 75
May .....	7	W. F. Dougherty .....	Burial expenses .....	5 00
May .....	8	A. Kudoby & Co. ....	Flour and bran .....	20 94
May .....	9	W. D. Bray .....	Polishing-dust .....	4 50
May .....	10	Mary B. Smith .....	Music .....	8 00
May .....	11	A. Kudoby & Co. ....	Flour .....	30 10
May .....	12	Smith & Shearman .....	Repairs .....	2 50
May .....	13	Field, Leiter & Co. ....	Dry goods .....	255 62
May .....	14	H. T. Bird .....	Burial casket .....	15 00
May .....	15	Hawk-Eye Pub. Co. ....	Subscription .....	10 00
May .....	16	A. L. Jameson .....	Charcoal .....	10 42
May .....	17	Field, Leiter & Co. ....	Hosiery .....	74 72
May .....	18	G. A. Talley .....	Repairs .....	7 85
May .....	19	H. T. Bird .....	Furniture .....	50 10
May .....	20	A. Kudoby & Co. ....	Flour .....	43 00
May .....	21	S. T. Hills .....	Sheep .....	19 00
May .....	22	Field, Leiter & Co. ....	Dry goods .....	79 61
May .....	23	T. W. Fawcett .....	Visiting Committee .....	18 00
May .....	24	C. H. Martin .....	Sand .....	7 85
May .....	25	Kiser & Pierson .....	Breadstuffs .....	4 25
May .....	26	C. P. Squires & Co. ....	Medical supplies .....	9 00
May .....	27	L. H. Dalhoff & Co. ....	Hosiery .....	15 00



## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
May . . . . .	66	Geo. L. Talbot . . . . .	Boots, and repairs . . . . .	3 60
May . . . . .	67	Edward R. Squibb . . . . .	Medical supplies . . . . .	73 13
May . . . . .	68	Male employees . . . . .	Salaries and wages . . . . .	1354 45
May . . . . .	69	Female employees . . . . .	Salaries and wages . . . . .	613 71
May . . . . .	70	Day laborers . . . . .	Salaries and wages . . . . .	408 63
May . . . . .	71	C., B. & Q. R. R. . . . .	Freight . . . . .	59 13
June . . . . .	1	George Cobb . . . . .	Lime . . . . .	17 97
June . . . . .	2	C. Bechler . . . . .	Butter . . . . .	14 40
June . . . . .	3	Thomas Giblin . . . . .	Wood . . . . .	772 25
June . . . . .	4	A. Kudoby & Co. . . . .	Flour and bran . . . . .	33 30
June . . . . .	5	Jacob Shopbell . . . . .	Mutton sheep . . . . .	96 39
June . . . . .	6	L. H. Fenton . . . . .	Labor . . . . .	6 00
June . . . . .	7	L. P. Willard . . . . .	Harness repairs, etc. . . . .	16 00
June . . . . .	8	A. Miltonberger . . . . .	Butter . . . . .	3 06
June . . . . .	9	L. S. Kincaid . . . . .	Visiting Committee . . . . .	22 00
June . . . . .	10	Acres Blackmar & Co. . . . .	Stationery . . . . .	7 70
June . . . . .			Vinegar . . . . .	13 20
June . . . . .			Stove bolts . . . . .	2 24
June . . . . .				
June . . . . .			Sorghum . . . . .	17 67
June . . . . .			Music . . . . .	8 00
June . . . . .			Oats . . . . .	16 25
June . . . . .			Coal . . . . .	321 64
June . . . . .			Butter . . . . .	5 50
June . . . . .			Butter . . . . .	29 88
June . . . . .			Return of patient . . . . .	31 00
June . . . . .			Beef cattle . . . . .	1827 55



## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879				
July . . . . .	7	W. C. Glenny . . . . .	Corn cultivator. . . . .	20 00
July . . . . .	8	Sol. Cavene . . . . .	Bay horse . . . . .	137 50
July . . . . .	9	Mark Ranney . . . . .	Habeas corpus suit . . . . .	16 74
July . . . . .	10	R. Eshelman . . . . .	Clothing. . . . .	41 50
July . . . . .	11	S. F. Baugham . . . . .	Oats. . . . .	47 52
July . . . . .	12	A. Herrick . . . . .	Hops . . . . .	1 85
July . . . . .	13	A. Kudoby & Co. . . . .	Bran, and butter. . . . .	12 50
July . . . . .	14	S. W. Garvin . . . . .	Dry goods. . . . .	15 24
July . . . . .	15	T. H. Lebew . . . . .	Glassware . . . . .	2 40
July . . . . .	16	Charles Orr . . . . .	Sand, and fence-posts. . . . .	22 14
July . . . . .	17	Thomas Giblin . . . . .	Wood. . . . .	33 05
July . . . . .	18	S. Craton . . . . .	Return of patient. . . . .	8 45
July . . . . .	19	Jno. Wright . . . . .	One bull. . . . .	26 00
July . . . . .	20	J. W. Henderson. . . . .	Current expense—petty account . . . . .	84 68
July . . . . .	21	Field, Leiter & Co. . . . .	Dry goods. . . . .	76 67
July . . . . .	22	Mary R. Smith. . . . .	Music . . . . .	8 00
July . . . . .	23	L. U. Fenton. . . . .	Labor . . . . .	10 50
July . . . . .	24	T. V. Traft . . . . .	Interest on loan to treasurer . . . . .	10 68
July . . . . .		user, Sr. . . . .	Shoes and slippers . . . . .	92 35
July . . . . .		erson. . . . .	Breadstuffs . . . . .	4 50
July . . . . .		l. . . . .	Medical supplies. . . . .	50 50
July . . . . .		iny . . . . .	Farm machinery, etc. . . . .	64 40
July . . . . .		lbot . . . . .	Shoes, slippers, repairs, etc. . . . .	15 95
July . . . . .		shliep. . . . .	Wagon repairs. . . . .	6 90
July . . . . .		ir. . . . .	Tobacco . . . . .	18 92
July . . . . .		re . . . . .	Clothing . . . . .	40 50
July . . . . .			Butter, eggs and fish . . . . .	33 42



.....	10 00
i couplings.....	6 90
.....	3 00
.....	23 54
.....	13 00
.....	101 11
.....	142 22
.....	102 08
etc.....	208 58
etc.....	18 33
.....	46 20
.....	54 04
.....	56 46
.....	18 75
.....	10 88
.....	2 68
.....	18 75
.....	52 06
.....	360 07
.....	29 37
.....	15 46
.....	6 72
.....	11 26
.....	9 10
.....	19 21
.....	29 00
nware.....	7 54
.....	36 00
.....	33 75
.....	43 56
.....	28 08
.....	6 92
.....	15 00
airs.....	2 40
epairs.....	11 78
.....	10 60
.....	40 66
.....	2 25

July.....	34 Colver & Hobbs.....
July.....	35 L. M. Rumsey & Co.....
July.....	36 F. E. Hobart.....
July.....	37 Barstow & Whitelaw.....
July.....	38 Hawk-Eye Publishing Co.....
July.....	39 John Blane.....
July.....	40 Biklen, Winzer & Co.....
July.....	41 Gould & Briggs.....
July.....	42 Farwell, Miller & Co.....
July.....	43 Pilger Bros.....
July.....	44 Kudoby & Co.....
July.....	45 Charles Orr.....
July.....	46 Field, Leiter & Co.....
July.....	47 McNab & Johnston.....
July.....	48 I. S. Hough.....
July.....	49 Russell & Erwin Manufacturing Co.....
July.....	50 McNab & Johnston.....
July.....	51 J. L. Mott Iron Works.....
July.....	52 Edward R. Squibb.....
July.....	53 Tilden & Co.....
July.....	54 James Lawrence.....
July.....	55 Ottumwa Starch Co.....
July.....	56 Parke, Davis & Co.....
July.....	57.....
July.....	58.....
July.....	59.....
July.....	60..... Co.....
July.....	61.....
July.....	62..... Co.....
July.....	63.....
July.....	64 Sol Hewitt.....
July.....	65 Charles Snider & Co.....
July.....	66 Mt. Pleasant post-office.....
July.....	67 E. L. Penn & Co.....
July.....	68 H. N. Crane.....
July.....	69 L. F. Willard.....
July.....	70 P. T. Twining.....
July.....	71 Royce & Hopping.....

EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				\$
July . . . . .	72	Rukgaber, McGregor & B.	Hardware and repairs . . . . .	19 30
July . . . . .	73	P. Summers . . . . .	Butter . . . . .	51 36
July . . . . .	74	S. W. Garvin . . . . .	Carpet . . . . .	6 30
July . . . . .	75	Mt. Pleasant Gas Works . . . . .	Lights . . . . .	130 50
July . . . . .	76	P. Jericho . . . . .	Mattresses renovated . . . . .	7 00
July . . . . .	77	B. F. Ross & Bro. . . . .	Lumber . . . . .	23 80
July . . . . .	78	P. C. Tiffany . . . . .	Stationery . . . . .	5 58
July . . . . .	79	L. Ketcham & Bros. . . . .	Breadstuffs and bran . . . . .	278 55
July . . . . .	80	Penn & Holwick . . . . .	Dry goods . . . . .	1 03
July . . . . .	81	George Cobb . . . . .	Lime . . . . .	7 82
July . . . . .	82	D. L. Moore . . . . .	Horseshoeing . . . . .	7 95
July . . . . .	83	N. L. Phillips . . . . .	Wheelbarrow, repairs, etc. . . . .	13 50
July . . . . .	84	W. M. Warwick . . . . .	D. G. . . . .	1 50
July . . . . .	85	R. C. Wells . . . . .	Horseshoeing . . . . .	5 15
July . . . . .	86	Newbold & Houseman . . . . .	Salt and codfish . . . . .	12 01
July . . . . .	87	C. B. Eshelman . . . . .	Clothing . . . . .	2 40
July . . . . .	88	R. Eshelman . . . . .	Clothing . . . . .	4 10
July . . . . .	89	J. M. W. Jones . . . . .	Stationery . . . . .	5 00
July . . . . .	90	Male employees . . . . .	Salary and wages . . . . .	1342 95
July . . . . .	91	Female employees . . . . .	Salary and wages . . . . .	606 04
July . . . . .	92	Day laborers . . . . .	Salary and wages . . . . .	558 45
July . . . . .	93	C., B. & Q. R. R. . . . .	Freight . . . . .	65 41
August . . . . .	1	Field, Leiter & Co. . . . .	Dry goods . . . . .	91 82
August . . . . .	2	B. H. Crane . . . . .	Hardware, tinware, etc. . . . .	6 28
August . . . . .	3	Humphrey & Eshelman . . . . .	Clothing . . . . .	10 00
August . . . . .	4	Farwell, Miller & Co. . . . .	Tea . . . . .	45 30
August . . . . .	5	G. C. Cook & Co. . . . .	Syrup . . . . .	33 45

August ..	6	Donahue, McCosh & Co.	Lime.	84 00
August ..	7	Fieldhouse, Dutcher & Belden.	Valves, fixtures, etc	109 32
August ..	8	Jno. Blane.	Coffee and sugar.	46 98
August ..	9	Kiser & Pinnon	Breadstuffs.	2 25
August ..	10	A. Kudoby.	Butter	8 10
August ..	11	Wm. C. Walter.	Watermelons.	8 17
August ..	12	S. Russell.	Corn	7 13
August ..	13	James Foggy.	Corn	5 82
August ..	14	Henry Swanson.	Corn	6 21
August ..	15	M. J. Taylor & Co.	Tobacco.	23 04
August ..	16	Chas. Prince.	Labor.	5 50
August ..	17	B. Peterson.	Corn	32 70
August ..	18	O. L. Lindeen.	Corn	6 76
August ..	19	L. S. Hough	Butter and eggs.	16 30
August ..	20	A. Kudoby & Co.	Flour.	44 00
August ..	21	L. H. Fenton	Labor	4 00
August ..	22	Wm. C. Walter.	Watermelons.	9 15
August ..	23	Russell & Erwin Mfg Co.	Lock fixtures.	2 16
August ..	24	Mt. Pleasant Gas Works.	Gas fixtures.	91 28
August ..	25	Leedham & Baugh.	Window-sash.	28 00
August ..	26	Wm. Blom.	Soap.	52 00
August ..	27	Clark & Lovelady	Codfish.	21 10
August ..	28	" & Belden.	Iron pipe.	27 90
August ..	29	0.	Sugar	122 95
August ..	30		Sugar, coffee, etc.	221 11
August ..	31		Dry goods.	139 65
August ..	32	Weinrich & Co.	Vinegar.	6 33
August ..	33	A. Kudoby & Co.	Flour.	46 20
August ..	34	W. C. Walter.	Watermelons.	11 80
August ..	35	T. H. Nevin & Co.	Putty.	2 25
August ..	36	L. Mitchell.	Chickens.	2 62
August ..	37	Chas. Harrison.	Fruit.	1 40
August ..	38	A. Kudoby & Co.	Bran.	8 13
August ..	39	H. L. Farr.	Return of patient.	5 00
August ..	40	J. W. Williams.	Oats	11 75
August ..	41	M. S. Claypoll.	Oats.	43 75
August ..	42	Ernst Hoyer	Sorghum.	16 10
August ..	43	H. C. Brown.	Pasture.	8 40

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Varrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
August ..	44	S. B. Olney.....	Visiting Committee .....	\$ 38 20
August ..	45	Western Union Telegraph Co.....	Telegraphing .....	1 02
August ..	46	A. Herrick.....	Hops.....	1 75
August ..	47	Mt. Pleasant Gas Works.....	Gas fixtures .....	4 52
August ..	48	H. A. Zulm.....	Wagon repairs, etc.....	12 50
August ..	49	S. W. Garvin.....	Dry goods.....	14 55
August ..	50	Mt. Pleasant Gas Works.....	Lights.....	164 40
August ..	51	P. C. Tiffany.....	Repairing organ.....	3 50
August ..	52	H. N. Crane.....	Stationery, etc.....	46 06
August ..	53	R. Eshelman.....	Clothing.....	26 75
August ..	54	Sol Hewitt.....	Butter, etc.....	11 70
August ..	55	Van Vorst & Andrews.....	Crockery and glassware.....	10 42
August ..	56	P. T. Twinting.....	Butter, eggs, fruit, etc.....	84 20
August ..	57	J. W. Satterthwait.....	Medical supplies, etc.....	13 72
August ..	58	George L. Talbot.....	Boots, shoes, and slippers .....	5 55
August ..	59	H. T. Bird.....	Furniture .....	7 50
August ..	60	Royce & Hopping.....	Iron bolts, repairs, etc.....	26 92
August ..	61	J. J. Parker.....	Furniture .....	9 50
August ..	62	Vancise & Co.....	Red lead, and white-wash brush .....	6 50
August ..	63	Newbold & Housen .....	Butter, etc.....	14 36
August ..	64	B. H. Crane.....	Hardware .....	20 31
August ..	65	G.....	Clothing.....	21 15
August ..	66	Gr.....	Hardware.....	4 00
August ..	67	Ri.....	Chimney tops, etc., etc.....	138 79
August ..	68	T.....	Clothing.....	2 25
August ..	69	Pa.....	Hose, fittings, etc.....	127 11
August ..	70	Dan Rleser, Sr.....	Shoes and slippers.....	102 75

.....	31 30
.....	8 43
.....	8 00
.....	15 90
.....	2 00
.....	159 32
.....	18 09
.....	1 00
.....	7 13
.....	38 26
.....	79 32
.....	100 38
.....	38 22
.....	20 75
.....	1829 82
.....	603 59
.....	449 03
.....	118 76
.....	55 08
.....	2 75
.....	16 00
.....	2 70
.....	16 10
.....	6 00
.....	17 67
.....	5 00
.....	378 12
.....	1 00
.....	3 50
.....	1 95
.....	32 58
.....	22 83
.....	2 00
.....	12 64
.....	9 05
.....	222 10
.....	5 51
.....	28 00

August ..	71 Panconst & Manle .....
August ..	72 J. W. Henderson .....
August ..	73 N. L. Phillips .....
August ..	74 G. A. Talley .....
August ..	75 R. C. Wells .....
August ..	76 Ketcham, Officer & Co. ....
August ..	77 Sharp & Smith. ....
August ..	78 A. Barton .....
August ..	79 Field, Leiter & Co. ....
August ..	80 Henry C. Meyer .....
August ..	81 Stettauer Bros & Co. ....
August ..	82 Bowen & Moore .....
August ..	83 Rikien Winzer & Co. ....
August ..	84 J. ....
August ..	85 J. ....
August ..	86 J. ....
August ..	87 Day laborers .....
August ..	88 C. B. & Q. R. R. ....
Septemb'r	1 T. E. Stevens .....
Septemb'r	2 Lee county poor-house .....
Septemb'r	3 F. E. Hobart .....
Septemb'r	4 George Macdonald. ....
Septemb'r	5 I. S. Hough .....
Septemb'r	6 M. T. Bevans .....
Septemb'r	7 Christine M. Bard .....
Septemb'r	8 James Stout .....
Septemb'r	9 Wm. M. Brown & Bros .....
Septemb'r	10 W. L. Brooks .....
Septemb'r	11 S. L. Steele .....
Septemb'r	12 C. W. Yancey .....
Septemb'r	13 S. Waters .....
Septemb'r	14 James Metzger .....
Septemb'r	15 L. H. Fenton .....
Septemb'r	16 B. F. Ross & Bro. ....
Septemb'r	17 Mount Pleasant Journal .....
Septemb'r	18 Pilger Bros. ....
Septemb'r	19 Sharp & Smith .....
Septemb'r	20 Jno. Blane .....

## EXPENDITURES—CONTINUED.

DATE.	No. Voucher and Warrant.	TO WHOM PAID.	ON WHAT ACCOUNT.	AMOUNT.
1879.				
Septemb'r	21	M. J. Taylor & Co.	Groceries.	23 04
Septemb'r	22	Geo. H. Schafer & Co.	Medical supplies.	7 50
Septemb'r	23	Biklen, Winzer & Co.	Molasses barrels.	3 15
Septemb'r	24	Kiser & Pierson	Out meal	4 00
Septemb'r	25	A. Miltonberger.	Butter	7 25
Septemb'r	26	O. L. Lindeen.		23 10
Septemb'r	27	Western Union Telegraph Co.		1 40
Septemb'r	28	Clark & Loveday		20 54
Septemb'r	29	Utica Steam Guage Co.		16 00
Septemb'r	30	C. Bechlen	Butter.	28 50
Septemb'r	31	J. W. Williams	Cider and apples.	5 70
Septemb'r	32	John Lynch	Corn	4 05
Septemb'r	33	Joseph Sawyer.	Corn	3 35
Septemb'r	34	M. L. Edwards.	Salary as treasurer.	93 29
Septemb'r	35	M. L. Edwards.	Express	22 98
Septemb'r	36	J. S. Routson.	Corn	4 57
Septemb'r	37	Edward R. Squible.	Medical supplies.	111 48
Septemb'r	38	Best & Woodbridge.	Soap.	4 50
Septemb'r	39	T. W. Fawcett.	Visiting Committee.	16 00
Septemb'r	40	J. W. Henderson.	Doct. account	53 92
Septemb'r	41	M. L. Edwards.	treasurer.	101 22
Septemb'r	42	C. B. & Q. R. R.		105 54
Septemb'r	43	Crane Bros. Manufacturing Co.		9 02
Septemb'r	44	Pancoast & Manle.		291 20
Septemb'r	45	Clark & Loveday		17 75
Septemb'r	46	Donahue & McCosh.		1 25
Septemb'r	47	Sharp & Smith.	ies.	33 58

Septemb'r	Medical supplies.....	54 70
Septemb'r	Stucco and lime.....	47 75
Septemb'r	Coffee.....	21 47
Septemb'r	Medical supplies.....	48 00
Septemb'r	Fittings.....	90 29
Septemb'r	Codfish.....	59 17
Septemb'r	Exchanges.....	18 00
Septemb'r	Hardware.....	9 16
Septemb'r	Crockery, etc.....	24 53
Septemb'r	Butter, eggs, etc.....	27 61
Septemb'r	Labor.....	88 10
Septemb'r	Pasture.....	25 80
Septemb'r	Book-case.....	70 00
Septemb'r	Graham flour.....	19 00
Septemb'r	Lumber.....	60 00
Septemb'r	Renovating mattresses, etc.....	9 00
Septemb'r	Salt, apples, etc.....	13 25
Septemb'r	Hardware, repairs, etc.....	117 08
Septemb'r	Clothing.....	29 25
Septemb'r	Breadstuffs and bran.....	254 30
Septemb'r	Exchanges and printing.....	37 88
Septemb'r	Clothing.....	58 00
Septemb'r	Butter, eggs, etc.....	20 82
Septemb'r	Music—organist.....	20 00
Septemb'r	Postage and stationery.....	42 70
Septemb'r	Dance music.....	54 00
Septemb'r	Butter, eggs, etc.....	104 46
Septemb'r	Interest on loan.....	3 34
Septemb'r	Light.....	204 69
Septemb'r	Salaries and wages.....	1399 96
Septemb'r	Salaries and wages.....	609 85
Septemb'r	Wages.....	472 56
Septemb'r	Salaries.....	1470 00
Less \$232.29, included by error in current expenses for Jan., 1879. See Spec'l Appr., where it belongs and is charged..		\$211500 38
		252 29
		\$211248 04

## PRODUCTS OF THE FARM AND GARDEN FOR 1877.

Apples, 53 bushels, at 75 cents.....	\$ 39 75
Asparagus, 207 dozen, at 8 cents.....	21 60
Beans, Lima, 62 gallons, at 50 cents. ....	31 00
Beans, string, 95½ bushels, at 75 cents.....	71 62
Beets, 424½ bushels, at 75 cents.....	318 37
Beets, greens, 30 bushels, at 75 cents .....	22 50
Cabbages, 7282 heads, at 10 cents.....	728 20
Currants, 266 quarts, at 5 cents .....	13 30
Celery, 2046 bunches, at 5 cents .....	102 30
Cucumbers, 1268 dozen, at 6 cents. ....	77 28
Corn, 277 bushels, at 33 cents .....	91 41
Corn stalks, 108 shocks, at 10 cents.....	10 80
Corn, sweet, 473 dozen, at 10 cents.....	47 30
Egg-plant, 131, at 5 cents.....	6 55
Grapes, 2120 pounds, at 5 cents.....	106 00
Gooseberries, 25 quarts, at 5 cents.....	1 25
Hay, 330 tons, at \$5.....	1650 00
Hay, slough, 35 tons, at \$3.....	105 00
Horse-radish, 12 dozen, at 15 cents.....	1 80
Lettuce, 2605 heads, at 1 cent .....	26 05
Milk, 64484 quarts, at 5 cents .....	3224 20
Oats, 753 bushels, at 20 cents.....	150 60
Onions, 237½ bushels, at \$1 25 .....	296 88
Pork, 23280 pounds, at 7½ cents .....	1746 00
Potatoes, 3334 bushels at 40 cents.....	1333 60
Peppers, sweet, 83 dozen, at 10 cents .....	8 30
Parsnips, 380 bushels, at 75 cents .....	285 00
Peas, 45 bushels, at \$1 50.....	67 50
Parsley, 200 bunches, at 1 cent.....	2 00
Pasturage for 60 head of cattle and stock, 7 months, at \$1 25 per head, per month.....	525 00
Radishes, 440 dozen, at 6 cents.....	26 40
Raspberries, 104 quarts, at 15 cents .....	15 60
Rhubarb, 281 dozen, at 6 cents.....	16 86
Rye, 225 bushels, at 45 cents .....	101 25
Sage, 105 pounds, at 75 cents.....	78 75
Sweet pumpkins, 2863 pounds, at ½ cent .....	14 31
Squash, 26291 pounds, at 1 cent .....	262 91
Strawberries, 428 quarts, at 15 cents .....	64 20
Turnips, 536½ bushels, at 25 cents.....	134 13
Tomatoes, 396¾ bushels, at 75 cents .....	297 56
Value of stock, and produce sold.....	871 35
Total.....	\$ 12995 48



## PRODUCTS OF THE FARM AND GARDEN FOR 1878.

Asparagus, 266 dozen, at 6 cents .....	\$ 15 96
Beans, Lima, 51 gallons, at 37 cents.....	18 87
Beans, string, 122 bushels, at 60 cents.....	73 20
Beans, H. P., 59 bushels, at \$1 80.....	106 20
Beets, greens, 48 bushels, at 50 cents .....	24 00
Beets, 238 bushels, at 50 cents.....	119 90
Cabbages, 6511 heads, at 4 cents.....	260 44
Currants, 186 quarts, at 4 cents .....	7 44
Celery, 540 bunches, at 4 cents .....	21 60
Cauliflower, 103 heads, at 8 cents .....	8 24
Cucumbers, 1003 dozen, at 6 cents .....	60 18
Corn, 1545 bushels, at 20 cents .....	309 00
Corn, sweet, 676 dozen, at 7 cents .....	47 32
Corn stalks, 500 shocks, at 10 cents.....	50 00
Egg-plant, 119, at 3 cents .....	3 57
Grapes, 4160 pounds, at 3 cents.....	124 80
Gooseberries, 10 quarts, at 4 cents .....	40
Hay, 247¼ tons, at \$4.....	990 00
Horse-radish, 10 dozen roots, at 6 cents .....	60
Lettuce, 9710 heads, at 1 cent.....	97 10
Milk, 21900 quarts, at 5 cents .....	1095 00
Oats, 1585½ bushels, at 15 cents .....	237 82
Onions, 287½ bushels, at 40 cents .....	83 00
Pork, 29195 pounds, at \$4 10.....	1197 00
Peppers, Sweet Mountain, 12 dozen, at 5 cents .....	06
Potatoes, 3588 bushels, at 40 cents.....	112 00
Peas, 47 bushels, at \$1 25.....	58 75
Parsley, 1170 bunches, at 1 cent.....	11 70
Pasturage for 65 head of cattle, and other stock, 6 months, at \$1 per head, per month .....	390 00
Radishes, 537 dozen, at 4 cents.....	21 48
Raspberries, 118 quarts, at 10 cents .....	11 80
Rhubarb, 178 dozen, at 8 cents.....	14 24
Rye, 176½ bushels, at 40 cents .....	70 60
Rails, 400, at \$3.....	12 00
Sage, 52 pounds, at 20 cents.....	10 40
Squash, 20120 pounds, at ½ cent .....	100 60
Spinach, 3430 heads, at 4 cents .....	137 20
Salsify, 625 roots, at 1 cent.....	6 25
Straw, 61 tons, at \$3.....	183 00
Stock and produce sold during year.....	1643 93
Strawberries, 127 quarts, at 10 cents.....	12 70
Turnips, 66 bushels, at 20 cents.....	13 20
Tomatoes, 345½ bushels, at 60 cents .....	207 20
Wood, 48 cords, at \$3....	144 00
<b>Total .....</b>	<b>\$9547 69</b>

## OFFICERS AND EMPLOYES

*In the Iowa Hospital for the Insane, at Mt. Pleasant.*

NAMES.	SERVICES.	COMPENSATION.
Mark Ranney.....	Superintendent .....	\$ 2,800 00 per year
H. M. Bassett.....	First Asst Physician ..	1,000 00 per year
M. S. Guth.....	Second Asst. Physician..	600 00 per year
E. B. Phelps .....	Third Asst. Physician..	600 00 per year
J. W. Henderson.....	Steward .....	1,000 00 per year
Martha W. Ranney .....	Matron .....	400 00 per year
John Thomas.....	Engineer .....	60 00 per month
Pat O'Connell.....	Fireman .....	40 00 per month
J. J. Fenton .....	Fireman .....	28 00 per month
H. Prince.....	Fireman .....	28 00 per month
Jacob McCoy .....	Butcher .....	40 00 per month
F. G. Ackerman .....	Baker.....	40 00 per month
Joseph Campbell.....	Farmer .....	27 00 per month
C. S. Richardson .....	Teamster .....	18 00 per month
William Baldwin.....	Teamster .....	18 00 per month
A. J. Kaelson .....	Teamster .....	18 00 per month
John Hart.....	Teamster .....	18 00 per month
E. T. Richardson.....	Teamster .....	18 00 per month
E. G. Sharick.....	Milk-man .....	23 00 per month
M. Pyle.....	Milk-man .....	21 00 per month
Swan J. Nelson .....	Car-man .....	21 00 per month
James Nash .....	Car-man .....	20 00 per month
E. P. Lingren.....	Kitchen-man.....	20 00 per month
T. Mount.....	Carpenter.....	2 50 per day
George Macdonald.....	Clerk ...	35 00 per month
M. Sutton.....	Chaplain .....	35 00 per month
J. Sutton .....	Supervisor .....	33 00 per month
John Madison .....	Watchman.....	28 50 per month
L. V. A. Ebbert.....	Dispensary clerk.....	20 00 per month
J. W. Thacker .....	Florist.....	25 00 per month
John Hall.....	Washer .....	23 00 per month
Victor Nelson.....	Washer .....	19 00 per month
James Wilson .....	Painter .....	2 25 per day
John Bragg.....	Attendant .....	28 00 per month
Godfrey Schmidt.....	Attendant .....	28 00 per month
E. J. Nicholson.....	Attendant .....	27 00 per month
F. A. Johnson .....	Attendant .....	26 00 per month
C. H. King.....	Attendant .....	27 00 per month
George Harkness.....	Attendant .....	29 00 per month
Hugh Ballentine.....	Attendant .....	29 00 per month
G. H. Lyons.....	Attendant .....	26 00 per month
P. J. Chrans .....	Attendant .....	28 00 per month
R. H. Tyler .....	Attendant .....	24 00 per month
Henry Plumer.....	Attendant .....	25 00 per month
S. Craton .....	Attendant .....	27 00 per month
John Howe.....	Attendant .....	25 00 per month
Orrin J. Lawrence .....	Attendant .....	25 00 per month
Henry Swanson.....	Teamster .....	18 00 per month
G. W. Whitford .....	Attendant .....	25 00 per month
O. P. Dotson .....	Attendant .....	25 00 per month

## FEMALE EMPLOYES.

NAME.	SERVICES.	COMPENSATION.
Meno Trope.....	Supervisor .. .. .	\$ 25 00 per month
Sophie Plumer.....	Watch .. .. .	22 00 per month
Sadie Kearns.....	Attendant .. .. .	16 00 per month
Jennie Trout.....	Attendant .. .. .	18 00 per month
Bertha Olsen.....	Attendant .. .. .	19 00 per month
Lettie Meacham.....	Attendant .. .. .	16 00 per month
Kate Fisher.....	Attendant .. .. .	17 00 per month
Ellen Matthews.....	Attendant .. .. .	16 00 per month
Minnie Ochiltree.....	Attendant .. .. .	14 00 per month
Emma Brown.....	Attendant .. .. .	16 00 per month
Anna Monsen.....	Attendant .. .. .	20 00 per month
Charlotte Martyn .. .. .	Attendant .. .. .	15 00 per month
Mary Dixon.....	Attendant .. .. .	17 00 per month
Eva Whittaker .. .. .	Attendant .. .. .	16 00 per month
Carrie Boyest .. .. .	Attendant .. .. .	17 00 per month
Julia Smith.....	Attendant .. .. .	18 00 per month
Sarah Murphy .. .. .	Attendant .. .. .	17 00 per month
Eva Johnson.....	Attendant .. .. .	15 00 per month
Mattie Bragg.....	Attendant .. .. .	12 00 per month
Anna Blower .. .. .	Seamstress .. .. .	15 00 per month
Sophie Gillespie.....	Seamstress .. .. .	11 00 per month
Elizabeth Snyder.....	Head ironer.....	14 00 per month
Merrie Stattler.....	Head ironer.....	11 00 per month
Jennie Allsup.....	Head ironer.....	10 00 per month
Josephine Faulkner.....	Head ironer.....	10 00 per month
Maggie Calhoun.....	Cook.....	13 00 per month
Anna Upton.....	Waitress.....	10 00 per month
Lisette Wahage.....	Kitchen girl.....	11 00 per month
Adelia Carroll .. .. .	Chambermaid.....	11 00 per month
Ray De Kalb.....	Chambermaid.....	11 00 per month
Amelia Wilson.....	Chambermaid.....	20 00 per month
Mary Coddington .. .. .	Kitchen manager .. .. .	11 00 per month
Lottie Allsup .. .. .	Milkmaid .. .. .	15 00 per month
Beccy Hurley.....	Cook.....	11 00 per month
Hannah Howe.....	Waitress.....	12 00 per month
Leah Lyon.....	Washer .. .. .	11 00 per month
Mary Nelson.....	Kitchen girl.....	11 00 per month
Clara Nelson.....	Assistant baker .. .. .	12 00 per month
Sadie Gillespie .. .. .	Kitchen girl.....	11 00 per month
Mary Fahrin.....	Kitchen girl.....	11 00 per month
Anna M. Cresswell.....	Attendant .. .. .	15 00 per month
Mollie Bell.....	Attendant .. .. .	15 00 per month

## DAY LABORERS.

NAME.	SERVICES.	COMPENSATION.
S. G. Heimbaugh.....	Gardener .. .. .	\$ 2 00 per day
John McLaughlin.....	Laborer.....	1 25 per day
L. H. Fenton.....	Laborer.....	1 25 per day
Wm. Smith .. .. .	Laborer.....	2 00 per day
Henry Long .. .. .	Laborer.....	1 25 per day
Frank McCormick .. .. .	Laborer.....	1 25 per day
John Reagan.....	Laborer.....	1 25 per day
Chris. Rukgaber .. .. .	Laborer.....	1 25 per day
Charles Connell.....	Laborer.....	1 25 per day



REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
HOSPITAL FOR THE INSANE  
LOCATED AT  
MOUNT PLEASANT.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
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1880.



## REPORT.

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TO THE EIGHTEENTH GENERAL ASSEMBLY OF THE STATE OF IOWA:

YOUR joint committee charged with the duty of visiting and inquiring into the management of the Iowa Hospital for the Insane at Mt. Pleasant, Iowa, beg leave to report that they have performed their duty in accordance with the concurrent resolution of the Senate and House of Representatives.

Your committee would report that on the 29th day of January, 1880, they met at Des Moines, Iowa, and effected an organization by electing Senator M. A. Dashiell chairman and Charles V. McClure clerk and reporter, and adjourned to meet at Mt. Pleasant, Iowa, on the 3d day of February, 1880, where they proceeded to the work on hand. The committee remained in session from day to day at Mt. Pleasant up to the 5th day of February, 1880, during which time they examined under oath the following persons:

Mr. T. Whiting, Dr. Mark Ranney, M. L. Edwards, and J. W. Henderson, and likewise examined the books, records, and vouchers connected with the financial management of the Hospital. Having completed their work there the committee adjourned to meet at Des Moines, Iowa, on the 11th day of February, 1880, for the further examination of witnesses, when the following persons were examined: Samuel Kline, David D. Davison, L. E. Fellows, Dr. M. A. Cleaves, Dr. A. Reynolds, E. G. Morgan, Hon. John H. Gear, and Geo. W. Bemis.

Your committee call attention to the testimony and exhibits herewith submitted. Your committee were charged with the following duties:

*First.* Whether the appropriations made by the last General Assembly have been wisely and economically expended.

*Second.* Whether they have been expended for the objects appropriated.

*Third.* Whether chapter 67 of the acts of the Seventeenth General Assembly has been complied with in contracting indebtedness in excess of appropriations.

*Fourth.* Whether there has been any diversion of any money from the specific purpose for which it was drawn out of the State Treasury.

*Fifth.* That the visiting committee to the Hospital for the Insane at Mt. Pleasant, in addition to the other duties devolving upon it is hereby specially authorized and directed to examine and report what, if any, violation of law has been committed by the Board of Trustees of said Hospital in diversion of support or other funds as it is alleged in the Biennial Message of the Governor, and whether said board has authorized the building of a road outside the limits of the property of the State, and for what purpose, and whether legally or wisely done, and also to examine any other complaints that may be laid before said committee touching the management of said Hospital or its finances.

Your committee would most respectfully submit the following report of their visit and examinations:

We began by visiting the Hospital in the official capacity as a visiting committee, and gave the Hospital building and grounds a thorough inspection. The Hospital building is an imposing structure. But a careful inspection will disclose the imperfect foundation upon which it rests. The sub-basement walls of the main building have been partially replaced during the last biennial period by new foundation under the supervision of the Superintendent, and your committee find the work done in a good, substantial, and workman-like manner, and would recommend an appropriation for its completion. The offices of the superintendents, steward, assistant physicians, and apothecary storeroom are located on the first floor of the Hospital. The wards for the patients are in the east and west wings of the main building. The laundry storeroom, and bakery are situated in the rear center building. The laundry is provided with all the necessary machinery, such as washing machines, wringers, and boilers necessary for the hospital. Above the wash-room is located the ironing room, in which is the



mangler which does a larger part of the ironing by steam power. The bakery is provided with a rotary oven and necessary machinery for making crackers.

The engine room is located in basement, of rear center building. The boiler room of the Hospital is located in rear of the rear center building. There are five large boilers located here of an improved pattern, and they are competent to perform the duties required of them.

Your committee also visited the minor buildings connected with the hospital, such as barn, ice-house, smoke-house, carpenter and blacksmith shops. The blacksmith shop should be replaced by a good, substantial structure. The shop now used for blacksmithing purposes is only temporary, and a new building for this purpose would be a saving to the state. The frame building used as a meat and smoke-house is almost falling down from decay, and a new structure for the storage of fresh and salt meats is a necessity. The ice-house of the Hospital we found in good condition and well stored with ice obtained from the different ponds and river in the neighborhood. The carpenter shop is all that is required for this institution, but there should be a building built for the storage of lumber. The barn and wagon-house we find sufficient for the wants of the Hospital, there being barn room enough for the stock upon the Hospital farm. The water supply of the institution, it is evident, is insufficient for the number of patients confined here. The lower reservoirs need considerable repairs, and the filtering houses, through which the water supply of the Hospital passes before being pumped to the upper reservoir for use of the institution, needs enlargement.

We find the Superintendent with his corps of assistants, very attentive to the wants of the patients, and the Superintendent of the Hospital a competent man to have charge of an institution of this kind; the sanitary condition of the Hospital very favorable for crowded state of the wards in the institution.

The capacity of the Hospital is three hundred, whereas there are now over five hundred patients confined here. This is altogether too crowded and should be remedied. We found the patients well cared for, the wards clean, well warmed and ventilated; bedding and clothing of the patients clean and in good condition. In fact, everything

connected with the patients and the household in superb order and condition, showing that the Superintendent gives his personal attention to all things connected with the Hospital. We find that the internal management of the institution, under the supervision of Dr. Ranney, is to be highly commended, but its finances have not been conducted as economically, and with an eye single to the best interest of the State, as might be desired.

As an investigating committee, your committee would report as follows:

*First.* The appropriations made by the last General Assembly have been wisely and economically expended.

*Second.* The appropriations have all been expended for the objects for which they were appropriated.

*Third.* The acts of the Seventeenth General Assembly have been complied with, in not contracting indebtedness in excess of the appropriations.

*Fourth.* There has been a diversion of money from the specific purpose for which it was drawn out of the State Treasury.

*Fifth.* Said committee shall report the names and number of persons employed by the several State institutions, for what purpose employed and at what salary; also whether any of the employed receives or has received anything in addition to the salary in the way of board, rooms, lights, fuel or clothing, or anything else at the expense of the State. Your committee herewith submit Exhibit A.

# **EXHIBIT A.** **OFFICERS AND EMPLOYES IN THE IOWA HOSPITAL FOR THE INSANE AT MT. PLEASANT.**

NAMES.	SERVICES.	COMPENSATION.
Mark Ranney .....	Superintendent .....	\$2,800.00 per year, with light, fuel, board and lodging.
H. N. Bassett .....	First assistant physician .....	1,000.00 per year, with light, fuel, board and lodging.
M. S. Guth .....	Second assistant physician .....	600.00 per year, with light, fuel, board and lodging.
E. B. Phelps .....	Female physician .....	600.00 per year, with light, fuel, board and lodging.
J. W. Henderson .....	Steward .....	1,000.00 per year, with light, fuel, board and lodging.
M. W. Ranney .....	Matron .....	400.00 per year, with light, fuel, board and lodging.
John Thomas .....	Engineer .....	60.00 per month, with light, fuel, board and lodging.
.....	Fireman .....	40.00 per month, with light, fuel, board and lodging.
.....	Fireman .....	28.00 per month, with light, fuel, board and lodging.
.....	Fireman .....	28.00 per month, with light, fuel, board and lodging.
.....	Baker .....	40.00 per month, with light, fuel, board and lodging.
.....	Farmer .....	27.00 per month, with light, fuel, board and lodging.
Joseph Campbell .....	Butcher .....	40.00 per month, with light, fuel, board and lodging.
Jacob McCoy .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
John Hart .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
William Baldwin .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
A. J. Kaelson .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
C. S. Richardson .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
Henry Swanson .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
Lafayette McCoy .....	Teamster .....	18.00 per month, with light, fuel, board and lodging.
E. G. Sharick .....	Milkman .....	23.00 per month, with light, fuel, board and lodging.
M. Pyle .....	Milkman .....	21.00 per month, with light, fuel, board and lodging.
Swan J. Nelson .....	Carman .....	21.00 per month, with light, fuel, board and lodging.
James Nash .....	Kitchen-man .....	20.00 per month, with light, fuel, board and lodging.
E. P. Lingren .....	Kitchen-man .....	20.00 per month, with light, fuel, board and lodging.
M. Sutton .....	Chaplain .....	35.00 per month, with light, fuel, board and lodging.
George Macdonald .....	Clerk .....	35.00 per month, with light, fuel, board and lodging.
J. Sutton .....	Supervisor .....	33.00 per month, with light, fuel, board and lodging.
W. A. Ebbert .....	Druggist .....	20.00 per month, with light, fuel, board and lodging.
John Madison .....	Watchman .....	28.50 per month, with light, fuel, board and lodging.
J. W. Thacker .....	Florist .....	26.00 per month, with dinner.
John Hall .....	Washer .....	23.10 per month, with light, fuel, board and lodging.

## OFFICERS AND EMPLOYEES—CONTINUED.

NAMES.	SERVICES.	COMPENSATION.
Victor Nelson.....	Washer.....	19.00 per month, with light, fuel, board and lodging.
T. Mount.....	Carpenter.....	2.50 per day, with dinner.
George Golden.....	Carpenter.....	1.80 per day, with dinner.
G. E. Ferris.....	Carpenter.....	1.80 per day, with dinner.
James Wilson.....	Painter.....	2.00 per day, with dinner.
Hugh Ballentine.....	Attendant.....	29.00 per month, with board and lodging.
Godfrey Schmidt.....	Attendant.....	28.00 per month, with board and lodging.
D. J. Nicholson.....	Attendant.....	28.00 per month, with board and lodging.
F. A. Johnson.....	Attendant.....	26.00 per month, with board and lodging.
John Stratton.....	Attendant.....	25.00 per month, with board and lodging.
F. A. Bradrick.....	Attendant.....	26.00 per month, with board and lodging.
Orrin J. Lawrence.....	Attendant.....	29.00 per month, with board and lodging.
George Harkness.....	Attendant.....	26.00 per month, with board and lodging.
G. H. Lyons.....	Attendant.....	25.00 per month, with board and lodging.
O. P. Dotson.....	Attendant.....	25.00 per month, with board and lodging.
G. W. Whitford.....	Attendant.....	25.00 per month, with board and lodging.
P. J. Chrans.....	Attendant.....	28.00 per month, with board and lodging.
Henry Plumer.....	Attendant.....	25.00 per month, with board and lodging.
R. H. Tyler.....	Attendant.....	24.00 per month, with board and lodging.
Samuel Craton.....	Attendant.....	27.00 per month, with board and lodging.
John Howe.....	Attendant.....	25.00 per month, with board and lodging.
Meno Trope.....	Supervisor.....	25.00 per month, with board and lodging.
.....	Watch girl.....	22.00 per month, with board and lodging.
.....	Attendant.....	18.00 per month, with board and lodging.
.....	Attendant.....	18.00 per month, with board and lodging.
.....	Attendant.....	14.00 per month, with board and lodging.
.....	Attendant.....	17.00 per month, with board and lodging.
Kate Fisher.....	Attendant.....	17.00 per month, with board and lodging.
Ellen Mathews.....	Attendant.....	15.00 per month, with board and lodging.
Meda C. Doverman.....	Attendant.....	15.00 per month, with board and lodging.
Minnie Ochltree.....	Attendant.....	15.00 per month, with board and lodging.
Anna Monson.....	Attendant.....	18.00 per month, with board and lodging.
Sadie Kearns.....	Attendant.....	18.00 per month, with board and lodging.

Lida Ferree.....	Attendant .....	16.00	per month, with light, fuel, board and lodging.
F. N. Hall.....	Attendant .....	15.00	per month, with light, fuel, board and lodging.
Kate Lite .....	Attendant .....	16.00	per month, with light, fuel, board and lodging.
Bertha Olsen .....	Attendant .....	19.00	per month, with light, fuel, board and lodging.
Eva Whittaker.....	Attendant .....	17.00	per month, with light, fuel, board and lodging.
Sarah Murphy.....	Attendant .....	18.00	per month, with light, fuel, board and lodging.
Julia Smith .....	Attendant .....	18.00	per month, with light, fuel, board and lodging.
Eva Johnson .....	Attendant .....	15.00	per month, with light, fuel, board and lodging.
Anna Blower.....	Seamstress .....	15.00	per month, with light, fuel, board and lodging.
Sophie Gillespie .....	Seamstress .....	11.00	per month, with light, fuel, board and lodging.
Elizabeth Snyder .....	Head ironer.....	14.00	per month, with light, fuel, board and lodging.
Merrie Stattler .....	Ironer .....	11.00	per month, with light, fuel, board and lodging.
Mary Cammack .....	Ironer .....	10.00	per month, with light, fuel, board and lodging.
Maggie Calhoun.....	Cook .....	13.00	per month, with light, fuel, board and lodging.
Lisette Wahage .....	Kitchen girl.....	10.00	per month, with light, fuel, board and lodging.
Sadie Gillespie.....	Waitress .....	10.00	per month, with light, fuel, board and lodging.
Adelia Carroll.....	Chambermaid .....	11.00	per month, with light, fuel, board and lodging.
Ray DeKalb.....	Chambermaid .....	11.00	per month, with light, fuel, board and lodging.
Amelia Wilson.....	Chambermaid .....	11.00	per month, with light, fuel, board and lodging.
Mary Coddington.....	Kitchen manager.....	20.00	per month, with light, fuel, board and lodging.
Becey Hurley.....	Cook .....	15.00	per month, with light, fuel, board and lodging.
Lottie Allsup.....	Milkmaid .....	11.00	per month, with light, fuel, board and lodging.
Mary Fahrni.....	Kitchen girl.....	11.00	per month, with light, fuel, board and lodging.
Lillie Cammack .....	Kitchen girl.....	11.00	per month, with light, fuel, board and lodging.
Mary Nelson .....	Kitchen girl.....	11.00	per month, with light, fuel, board and lodging.
Hannah Howe.....	Waitress .....	11.00	per month, with light, fuel, board and lodging.
Leah Lyon.....	Washer .....	12.00	per month, with light, fuel, board and lodging.
E. B. Thompson.....	Washer .....	11.00	per month, with light, fuel, board and lodging.
Clara Nelson .....	Assistant baker .....	12.00	per month, with light, fuel, board and lodging.
Emma Brown.....	Attendant .....	17.00	per month, with light, fuel, board and lodging.

No clothing or other perquisites are allowed any officer or employe.—MARK BARNES, Med. Supt.

EXHIBIT B.

INSANE HOSPITAL AT MT. PLEASANT.

Interest paid and discount on warrants for 1878.....	\$4,217.88	
Interest paid and discount on warrants for 1879.....	2,552.47	
		<u>\$6,770.35</u>
Less,—		
Interest receipts for 1878.....	\$ 638.41	
Interest receipts for 1879.....	1,221.68	1,860.09
		<u>1,860.09</u>
Net payment .....		<u>\$4,910.26</u>

Under instruction, Article VI, concurrent resolution, your committee would most respectfully report the following:

In our opinion the Board of Trustees have diverted support funds:

*First.* In the construction of a boiler at a cost of some two thousand dollars;

*Second.* In the macadamizing of a road outside the Hospital grounds and within the limits of the city of Mt. Pleasant, at a cost of some nineteen hundred dollars, said road leading from the Hospital gate to railway switch.

These improvements have been paid for out of the current expense funds, contrary to Section No. 1390, of the Code, which is as follows:

“But no part of the money so drawn for current expenses shall be used in making improvements.”

The Trustees justify their action in the building of the road leading from Hospital gate to railway switch, by saying the condition of the road was utterly impassable, so that supplies needed by the Hospital could not be transported at certain seasons of the year. The capacity of the old boilers was entirely inadequate to warming the building and rendering the inmates comfortable.

And the Board urge, with great force, the extreme necessities in justification in thus diverting and expending the funds thus referred to. The committee call attention to the testimony herewith submitted in this regard; but the committee fail to find any justification for thus diverting the funds on account of the necessity urged, and are of the opinion that the only plain duty of the Board, under the circumstances, was to have applied to the Executive Council under the law for any relief, and that they were not justified in diverting the funds for the construction of the highway or the building of the boiler.

We find also, that the Treasurer of the Hospital has paid in interest and discounts on warrants, during the last biennial period, six thousand eleven hundred and seventy and thirty-five one hundredth dollars, less interest earned of warrants, eighteen hundred and sixty and nine one hundredth dollars, making a net loss of four thousand nine hundred and ten and twenty-six one hundredth dollars of interest and discounts to the Hospital, as shown by Exhibit B.

On examination of the law, we fail to find any authority authorizing the Board of Trustees, or the Treasurer, to borrow money or pay interest.

Testimony reveals the fact that dissensions exist in the Board of Trustees, which the committee regret to see, and which are detrimental to the best interests of the institution.

All of which is respectfully submitted.

M. A. DASHIELL.

M. M. HAM.

*On part Senate.*

A. M. WHALEY.

F. M. EPPERSON.

PLATT WICKS.

*On part House.*



# TESTIMONY BEFORE INVESTIGATING COMMITTEE.

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## TESTIMONY OF T. WHITING, ESQ.

FEBRUARY 4, 1880.

Name: T. Whiting; residence, Mt. Pleasant, Henry county, Iowa. I am a member of the board of trustees, and I am president of the board, and have been since July, 1876. The expenditures from the support fund are not all made by the order of the board; all the ordinary bills on the support fund are by order of the trustees. We have always drawn full amount from the state treasurer, at the January meeting; we draw for fifteen dollars per month; before that we drew full amount allowed by law. We draw upon number of patients in the hospital on the 15th of each month. The steward and Dr. Ranney make out the requisitions.

In drawing the support fund: reason more drawn here than at Independence, would say that we have had a large amount of repairs to make here, boiler to repair, etc. The last requisition we made was fifteen dollars per month, and the reason it was fifteen dollars was because we thought fifteen dollars would answer.

### DR. RANNEY EXAMINED.

At the close of 1879, when the bills were all in, I run the bills over and found fifteen dollars per month would support each patient; so reported to the trustees, and this was the reason the reduction was made from sixteen dollars per month. This reduction was made on January 2d, 1880.

(See page 73 of report).

### MR. T. WHITING RECALLED.

I understand there has been funds used from the expense fund for repairs. All the bills that are paid are audited by the trustees; all bills are paid by order of the trustees; the bills are kept separate,

each month by itself, and then examined quarterly and ordered paid by the trustees. These repairs that have cost some sixteen thousand dollars, have not all been done by order of the board. I don't know whether the flagging in the basement, on which the railroad was built, was or was not by order of the board; it was approved after it was done. The work was done by order of Dr. Ranney; so was the flagging in the market place.

(Question about road from hospital gate to railroad switch, not answered. Record of board of trustees produced by Mr. Whiting and put in as authority for building the road. Abstract from record is as follows:)

“Roadway to railroad switch:

“Ordered, that the board non-concur in the recommendation to macadamize the roadway from the hospital gate to the railroad opposite. Authority is, however, granted so to repair the bad places in said road as to make it passable for teams in hauling freights from the side-track of the said railroad to the hospital.”

This being the authority, the road has been macadamized except about two hundred feet. I regard this work to have been an absolute necessity. This street in front of the hospital is inside of the city limits; the street is unused. The building of the new boiler, one year ago this winter, was done by order of the board. I don't know who made repairs on the old boiler. Mr. Branagan built the new boiler; he constructed the boiler by order of the board.

Action was taken in regard to building the new boiler October 1st, 1878. Judge Fellows suggested that the superintendent be authorized to build the boiler and to utilize the labor of the hospital. (See paper marked Exhibit A, original.) Mr. Branagan was in Texas, and was sent for by Dr. Ranney to come here and construct the boiler. I cannot tell how much Mr. Branagan was paid per day, and don't know how much he was paid as railroad fare. At our meetings of the board minor matters are talked over, but are not made a matter of record. The flagging for tramway in basement, flagging in store-room, etc., I am not positive whether it was spoken of or not in the board, but think it was brought to their knowledge and had the full approval of the board. Dr. Ranney may have had, and undoubtedly has made, repairs, and after they were finished they were called to the attention of the board. When the boiler was talked over, etc., it was paid for by approval of the board out of the general expense fund. We twice asked the legislature to make an appropriation for boilers, but they would not allow

it, and then we used the general expense fund to build the boiler. The building of the new boiler was not in compliance with the law, but the trustees strained the law and deemed it a necessity to go ahead and build the boiler; and the same would apply in regard to the road from the hospital gate to the railroad switch. I would say to the committee that we have always acted as a unit, and have never forced any measure by a bare majority. I took the doctor's suggestions, and called for a vote of a full board at our last July meeting.

(Letter submitted, dated May 21, 1879, marked Exhibit B.)

(Letter submitted, dated May 23, 1879, marked Exhibit C.)

(Letters submitted, dated October 24 and November 25, 1879, marked Exhibit D.)

I first got this minority report early in November; I didn't know of any minority report until I received it. Judge Fellows was not present at the October meeting, 1879.

(Letter submitted, marked Exhibit E.)

T. WHITING RECALLED.

FEBRUARY 5, 1880.

In regard to this man Branagan, don't know anything about him. Dr. Ranney was authorized to attend to the building of the boiler. The iron guards for windows were made and bought here in town. The old guards were broken by the patients, and some of the patients got out. It was found new ones were needed, and the board ordered them. They were paid for. Don't remember any discussion or dispute in regard to paying for them. I said in my former testimony that there was some things ordered by the superintendent and steward and paid by the trustees that they had not ordered. I now desire to recall this statement, and say I cannot remember whether all the improvements were made before approval, or approved after. The board have approved of all the repairs and improvements made by Dr. Ranney. The superintendent does not go ahead and make any repairs without the trustees' sanction. He (Dr. Ranney) has never, as I know of, ordered any improvements without the approval of the trustees. The difference in the bills for drugs between hospitals at Mt. Pleasant and Independence would be larger at Mt. Pleasant, for the reason that the number of patients are larger at Mt. Pleasant than at Independence, and the treatment may differ between the two institutions. The iron bill for rear centers, amounts to between \$4,000 and \$5,000, and we had bill and bids from different firms to get lowest prices. We figured on

freight, and looked over list of discounts allowed by different firms, and always selected the best. There was no difference of opinion among the trustees in regard to these iron bills.

Three years ago we did not get money for two or three months; after that we run on until another collection of taxes. Judge Edwards, the treasurer, had to look around and find parties to take the warrants. He found some parties here who took some, and he had to look to other points for discounts. The bank discounted one warrant for Edwards at 2 per cent discount. Edwards, when he borrowed money, was told by the trustees to do the best he could; he would call the attention of the board, and they would authorize him to go ahead and do the best he could. Edwards, when he sold the warrants, figured up the 6 per cent interest and got the amount of interest, if there was any amount of interest accumulated. When Edwards borrowed money he gave warrants as security. Drs. Ranney and Bassett have some capital; would say Dr. Ranney's capital is about \$10,000. Dr. Bassett has been here fifteen to sixteen years, and was superintendent about two years, and he has some capital. Dr. Ranney has never, to my knowledge, received any interest on his salary. He has been paid quarterly, and never received any interest. The institution gets lower rates by paying cash. The board of trustees understood that the treasurer was borrowing money at 10 per cent interest. There was no trouble to get warrants discounted, but the difficulty was the rate of discount.

I think it would have been cheaper for the institution to have discounted state warrants at  $1\frac{1}{2}$  to 4 per cent than to borrow money at 10 per cent interest. The treasurer has usually conferred with the executive council about cashing warrants. Back two or three years ago I never heard of trustees conferring with the executive council. When we had this trouble two or three years ago the trustees didn't notify the executive council, as far as I know of. In report: The item of hardware, I cannot tell the nature of the hardware. The painters' supplies were paid for out of expense fund. The board of trustees refused to authorize the doctor to go ahead and repair the road as it is now repaired. A portion of the stone was hauled out of the quarry; we had authority to have refuse stone by paying so much per perch for stone used in rear center building. Some of the stone used on the road was bought from other quarries. I should say this road from hospital gate to railroad switch cost about eleven to twelve hundred dollars. I think the putting of this stone in this road was repairs under

our resolution; but strictly speaking, should say it was both repairs and permanent improvements.

The steward makes purchases, and by advice of Dr. Ranney, with understanding to be paid monthly, and the board look over the bills quarterly and approve of same, and they are ordered paid.

The board of trustees made our by-laws before I became a member of the board. They have an order book, where all things ordered by the hospital are entered, and before any goods are ordered requires the approval of the superintendent. On the first day of meeting of the trustees there was a petition sent to the board with strong recommendation that some one else be appointed treasurer of the hospital; and asking that Mr. Arnold be appointed. All the prominent persons on the petition were prominent persons of Mt. Pleasant, Governor Newbold, etc., etc. The bond of the treasurer of the hospital is fifty thousand dollars.

In the special appropriation made by the legislature two years ago: One of the appropriations was diverted to build rear center building. There was no indebtedness contracted beyond the amount appropriated. There was no money diverted from the special appropriation for any other purpose as I know of. The only compensation treasurer received was one-half of one per cent of all money that passed through his hands. I don't think he ought to get interest on the amount he borrowed and paid back to himself. If he did get any per cent so, I did not know of it. I think his salary would amount to six or seven hundred dollars per year. One difference between the expenses here at Mt. Pleasant and Independence is, that here at Mt. Pleasant we pay larger salaries, and we have more attendants, and this is one reason it costs more per capita, per patient, here than at Independence.

The new boiler cost between twenty-one and twenty-two hundred dollars, at the time we built it. The reason we sent to Texas for Branagan was that Dr. Ranney thought he was necessary, as Branagan was the inventor of the boiler.

: T. WHITING.

#### TESTIMONY OF M. L. EDWARDS.

FEBRUARY 5, 1880.

Name: M. L. Edwards; residence, Mt. Pleasant; have retired from business. I was last connected with the hospital as treasurer; was, years ago, trustee of the hospital. I have been connected with this in-

stitution since it has been opened; was acting as clerk for the building committee, and when they closed up their business I was chosen trustee. I have been treasurer about one dozen years; I ceased to be treasurer last October. Compensation of treasurer is one-half of one per cent of what is received and paid out. The compensation of treasurer has amounted to about five to six hundred dollars per annum; the last few years sometimes over six hundred dollars. If the state had money I got currency or drafts. The State issues warrants; the state auditor issued the warrants in my name. When a draft was sent me I had to pay the exchange; the draft for amount of warrant is less the exchange; the institution has to pay the exchange. I got very little currency in the last two years; I got drafts and warrants largely in the last two years, principally warrants. I should say during the last biennial period, of the amount of appropriations received, three-fourths were in state warrants received by me from the State. The warrants were disposed of at par once in a while, but I had to pay exchange. About three-fourths of the warrants I received I had to discount. The rates of discount were from one and one-half to four per cent. Some of the first warrants I disposed of here to the banks were discounted five per cent, with the understanding I was to get back all over ten per cent received by the bank when warrants were paid. One and one-half to four per cent was about the average discount paid by me. Warrants were discounted at banks at Mt. Pleasant and Burlington, Iowa. The warrants were made in amounts according to my order by the state auditor. If I got a warrant from state auditor for ten thousand dollars, I deposited in the bank. Bank would credit my account, less the discount. And if I sold in Burlington he would do the same, only would take the certificate on bank here less the discount. The warrants run about two or three months, sometimes five or six months, sometimes longer, before they were paid by the state treasurer. These warrants were not all indorsed by the state treasurer. Those not indorsed would not draw interest. I should think the discount on state warrants in the last biennial period would amount to twenty-five to twenty-six hundred dollars. The reason these warrants were discounted was that there was no money in the state treasury. I generally wrote to state treasurer to see if there were funds in his hands before I discounted my warrants. When I received warrants I sometimes deposited warrants in bank and borrowed money on them at ten per cent interest. The money loaned was credited to my account. I

sometimes borrowed money from Drs. Ranney and Bassett, and gave them warrants to hold as security. The warrants were always returned to me. The interest paid Dr. Ranney was for money borrowed from him. I sometimes had as much as ten thousand dollars from him. Copy of record read by Mr. Edwards. Copy as follows :

(March 8, 1877, pages 5 and 6.)

"The treasurer submitted to the board a statement setting forth his doings in obtaining the necessary funds to carry on the operations of the hospital; said statement being in writing, and having been read and considered, it was, on motion, ordered that the action of the treasurer, as so set forth, be approved by the board, and that said statement be entered upon the records and placed on file."

The said statement is therefore recorded as follows:

*"To the Board of Trustees of the Iowa Hospital for the Insane at Mt. Pleasant:*

"The undersigned, treasurer of the hospital, respectfully reports to the board that he has been obliged, from time to time since August last, in consequence of the inability of the state treasurer to pay money on warrants in his favor on hospital account, to obtain money for the use of the hospital either by hypothecating or selling such warrants on the best terms he could. For some months at first the banks at Mt. Pleasant took the warrants at their face, on agreement that they should receive ten per cent interest on the amount so taken, up to the time of payment of the warrants by the state treasurer; the interest received on the warrants to be accounted for as part of the ten per cent interest. Other parties in the vicinity have taken between nine and ten thousand dollars on the same terms. December 22d a twenty-five hundred dollar warrant was sold to the National State Bank of Burlington, at two per cent discount, the bank charging exchange and accounting for accrued interest. December 26th other warrants, to the amount of five thousand dollars, were sold to the same bank at the same terms. Warrants were disposed of to the Mt. Pleasant banks at the dates mentioned, with five per cent discount, with an agreement on the part of the banks that if they are paid before the first of November next that they will refund all of said discount over and above ten per cent interest on the same, to-wit:

"January 2d, First National Bank, \$4,500.

"January 2d, National State Bank, \$4,000.

"January 29th, First National Bank, \$3,650.

"March 5th, National State Bank, \$3,050.



"The bill for discounts of seven hundred and sixty-eight 35-100 dollars (\$768.35) allowed the undersigned, as shown in the January account of the steward, was on account of warrants sold as above, excepting those sold March the 5th, after said bill was rendered. A part of such discount may or may not be refunded, depending on time of payment. Some (39,000) thirty-nine thousand dollars of warrants so issued are yet unpaid.

"Respectfully submitted.

"M. L. EDWARDS, *Treasurer.*"

The interest paid to Dr. Ranney was for money borrowed from him; I had sometimes as much as ten thousand dollars from him. I borrowed larger amounts of money from Dr. Ranney than any other single individual; I had ten thousand dollars from Dr. Ranney for a considerable time. I always secured these loans by state warrants when I gave security. The agreement was that I should pay the different parties money borrowed when warrants were paid. I borrowed money from myself and allowed myself interest same as any one else, ten per cent interest. Most of these parties mentioned by your list [marked Ex. K] were attendants in the institution. Dr. Bassett loaned me between four and five thousand dollars. I understand Dr. Ranney received this money in part from the East, to loan the institution. I suppose he had money loaned East and brought it here to loan the institution, as he could do better with his money here. Mrs. Ranney advised the attendants to loan their money to me. I never offered the attendants pay in state warrants; I never paid any of the bills of the institution in warrants. The reason we had to borrow money was that we could not get money from state treasurer, as taxes had not been paid. In report two years ago: The loans made with Drs. Ranney and Bassett had not matured, reason the report does not show interest account, as some had accrued previous; at the time I went out of office there was not any interest left unpaid; loans had all been paid before I went out of office. In report two years ago: The reason the treasurer's report does not show the twenty-nine hundred dollars borrowed money was that it was an outside transaction, and didn't enter into the report of receipts and payments. I had in warrants three thousand two hundred and twenty-nine dollars (\$3,229) when I borrowed this money; I didn't enter on my books the money borrowed from different parties, only entered the amount paid as interest on the money borrowed. The steward pays all bills and I receipt to him; anything he sells off of the farm he pays over amount as treasurer and I receipt to him. The



steward charges himself with all requisitions made on auditor of state; they enter his accounts as well as mine. Two years ago I made report as I had previously made; this twenty-nine hundred dollars was an outside transaction; it was reported to the trustees, and it was satisfactory to them. I borrowed this money and turned over warrants as security, and when I paid the loans I got the warrants back in all cases. I charged myself in my accounts with interest on the warrants. When the state treasurer had money I got the money, and deposited it in bank, amount received. The steward charges himself with all money that comes into his hands. In last two years I paid four thousand and ninety eight dollars in interest, because I could not get cash from state treasurer; I could get warrants. One reason why we had to borrow money was because we could only get our warrants every three months, and we had to use funds obtained from warrants to pay previous bills contracted for the previous two months; so we were always two months behind. When I borrowed money I gave a statement stating I had borrowed for the institution, the rate being ten per cent interest. I sometimes borrowed money without giving state warrants as security.

The executive council knew about the institution being short of funds. I wrote to state auditor about it, and was given to understand if I would notify him they could get the money, but this was only lately. The state treasurer did cash some of the last warrants, and it only cost me the exchange on the amount remitted. When I borrowed money and paid ten per cent interest and gave warrants as security, the warrants came back to me, and I always got the interest on the warrants and charged myself with it. I sometimes sold a warrant when it was understood the parties were to have the interest, but this interest was only a day or two, or a short time. When I resigned office of treasurer of the institution, I turned over to my successor in office, C. V. Arnold, two thousand nine hundred and four 44-100 dollars (\$2,904.44). I never kept a book account of this loan matter; kept the accounts on slips of paper. I never had any other authority for borrowing money than from this record of the trustees; I don't know whether the executive council all knew of my borrowing money; the auditor and treasurer knew of it. I don't know anything to contrary of the amounts appropriated being expended for any other purpose than the fund appropriated for.

I never considered that by borrowing money we were contracting indebtedness in violation of the law; don't think it occurred to me. I

don't know of my own knowledge of any money being expended for any other purpose than for that appropriated. When the steward draws on me for money I never looked to see if there was a balance in my hands of the fund drawn against. I was always satisfied I had funds on hand to pay. The fifteen hundred dollars contingent fund of 1877: The item of one hundred and nine dollars, drawn against this fund in my favor, I would say I was not aware the amount was drawn against this fund. I never received any other compensation than one-half of one per cent as salary as treasurer. I never received any interest from banks on amounts deposited by me as treasurer of the institution.

I left to the trustees the business of drawing money from the different funds. Never questioned the authority of drawing money from the expense fund to pay for the boiler, or road from hospital gate to the railroad switch. All the bills are paid before they are submitted to the board. The board, superintendent and steward would consult together and agree to order purchases of cattle, stores, etc., and the steward authorized to make purchases. That is the way it was when I was a member of the board.

I received one-half of one per cent on the interest paid to the different parties, and received my per cent on interest paid myself as well as other parties. The one-half of one per cent was allowed on all interest paid out by me.

M. L. EDWARDS.

### TESTIMONY OF DR. MARK RANNEY.

FEBRUARY 4, 1880.

Name: Mark Ranney; residence, Mt. Pleasant, Iowa; occupation, superintendent of hospital for insane.

*Question.* What has been done with the appropriation fund two years ago?

*Answer.* The board of trustees, at the last meeting, agreed and voted to allow fifteen dollars per month instead of sixteen dollars, and for the months of October, November and December \$19,800 was appropriated. Two years ago there was \$969 on hand, which has all been expended since. In addition to \$19,800, drew \$5,000, which since has been expended for walls of sub-basement, in addition of \$19,800; total, \$24,800 in special improvement account. There was also on hand \$732.67 for special appropriation two years ago, which

has since been expended. The balance of special funds, \$691.21; this amount belongs to laboratory, and will be expended for that purpose. Two years ago the \$1,500 contingent fund was expended in completing the rear center building, and it was all spent. The item of \$109 paid out of the contingent fund of \$1,500, to Edwards; this \$109 was the treasurer's compensation of one-half of one per cent of amount of appropriations that had passed through his hands. Vouchers are here and in the hands of the auditor of state. This \$1,500 has been used, and will appear in the item of rear center building and mangle. All over \$10,000 came from this \$1,500; \$669.71 is the balance of the \$1,500 in the treasurer's hands.

(The doctor's attention called to pages Nos. 75 and 76 of report of contingent fund, and explained by saying:)

Traveling expenses, telegrams, etc., was paid; also, sending patients home to their friends, and with attendants, etc.; charges on express matter, printing, etc.

(Item on page No. 98, J. W. Henderson, he explained by saying:)

The trustees allowed him to pay amounts under one dollar without voucher, and when he draws all are grouped together and a voucher given for all.

(Attention called to page 75, \$6,451 and \$9,000 repairs.)

The distinction between repairs and improvements I explain as follows: All the work the carpenters do in the wings, repairing chairs, wood work, floors, plastering; all material used by painters, glass broken and painting, go into repairs. The roadway has come in under head of repairs, from gate outside of our building; \$450 was paid on boiler as repairs. It cost \$32,046.43 during the previous biennial period for repairs, etc.

(Paper marked Exhibit F gives items and amounts, and from what source obtained, page 66.)

The black walnut tables and chairs (two and one-half dozen tables and four times as many chairs) all were charged to repairs or general fund. The tramway in the basement came out of the repair funds. Looking to the future, I think it was the most economical. It would have been cheaper to put down wood. The old tramway would shrink and swell, and the track would get out of place and spill food, and considerable would be wasted. Did what I thought was for the best interests of the institution, and did not consider the cost.

The mangle is the ironing machine in the new building. The special appropriations made two years ago have all been expended for the

specific object for which the different amounts were appropriated. The road from here to the railroad switch was charged to repairs, and I regarded it as necessary; forty-five to fifty yards of chips and rock were used from refuse material obtained in the basement. The road from the hospital gate to the railroad switch cost, as near as I can figure it, about \$1,900. The extra amount of stone for the road was purchased by me under general order of the board, which reads as follows:

“Ordered, that the board non-concur in the recommendation to macadamize the roadway from the hospital gate to the railroad opposite. Authority is, however, granted so to repair the bad places in said road as to make it passable for teams in hauling freights from the side track of the said railroad to the hospital.”

DR. RANNEY RECALLED.

FEBRUARY 5, 1880.

Another item was cleaning out settling pond, where we get our water, and have made a substantial stone dam across this creek to hold the water in the pond. Took out from 7,000 to 8,000 yards of dirt at a cost of from \$1,600 to \$1,700; and we put that item in to repairs. We (the trustees and myself) made an effort to get the city of Mt. Pleasant to repair this road, but they refused.

Page No. 31, governor's message, read, and Dr. Ranney asked to explain. Manuscript furnished by Dr. Ranney and read as reply. Marked Ex. G.

I consider a considerable item of this difference enters into repairs. We have employed here a larger number of attendants per patient than they have at Independence. Gas costs us 3,200 dollars per year; it costs Independence hospital about 1,000 dollars per year. My salary was 3,000 dollars; Dr. Reynolds' salary 2,000 dollars; I have reduced my salary 200 dollars. My first assistant receives 1,000 dollars salary per year; Dr. Reynolds' first assistant receives 900 dollars. I have two second assistants at 600 dollars per annum each; Dr. Reynolds has only one second assistant, at 600 dollars. Then, they pay their attendants less; we cannot get kitchen girls, wash girls and ironers at eight dollars per month, as they do at Independence. We cannot get male attendants for less than 24 dollars per month, with one dollar increase per month per annum. I don't mean to say my attendants are superior to Dr. Reynolds', but I cannot get such attendants as I would trust with the patients; and then the attendants should be above the average common

hired help. Think the attendants exert a good or bad influence, as the case may be, and try to get only such persons as attendants as I think would have a tendency to exert good influence. Our item of fuel is quite an item of large expenditure. We keep up a very active ventilation, and it consumes some coal to keep the fan running, and I keep the fan running all night. We do not let the wards cool off at any time. I have the impression we supply a more liberal diet here than they do at Independence; we have meat on all the tables twice a day except one day, when we have fish; we have allowed our patients free allowance of butter, etc.

I would not regard 14 dollars per patient as sufficient support funds for this institution; 15 dollars, I would say, would be sufficient, and this would include repairs. The reduction we have made to 15 dollars per month was made before we had any intimation what the governor would say in his message. I am satisfied that if an institution is crowded, the cost per patient would increase instead of being lowered. They at Independence have 20 wards and we have only 18 wards, and yet we have from 50 to 60 more patients than they have at Independence. We have wards in which there are 30 to 40 patients, in which there should only be 15 to 20 patients. We have only 18 classes. Capacity, 300 patients.

The new boiler was constructed by action of the board; I superintended its construction and employed Mr. Branagan. There had been application made to the sixteenth and seventeenth general assemblies for an appropriation for to build this boiler; they passed the application by. I told the board of trustees a crisis had come, and we could not do without the boiler; it was a matter of absolute necessity to build this boiler. We took the responsibility of building the boiler, and leave this committee to say if it was in strict compliance of the law. I sent to Texas for Mr. Branagan, and paid him fifty dollars to come here, as traveling expenses, and gave him six dollars per day; and then he held a patent, and we could not have obtained a boiler like it without infringement on his patent. The boiler cost about 2,050 dollars. This boiler is made out of extra heavy iron, heavier than enters into the construction of ordinary boilers, and is built of heavier and better iron than our other boilers. The fire-box is built of SS. iron; the whole outer shell of the boiler is of 5-16-inch iron; the crown head of the boiler is of 3-4-inch iron. The three old boilers have been used

eleven years, and the one we repaired is being used twelve years. This man Branagan is dead.

The reason the inventory of stock, etc., that was handed to this committee this morning, *marked Ex. H*, was not put in the published report, *was an oversight*. The ice-house, greenhouse, pump-house, and all east wing plastering, putting in fire-doors, etc., was taken out of expense account fund, and the board of trustees thought they had power under Code of 1860, which gave trustees power to draw money from time to time. The Code of 1873 limited the amount to twenty dollars. Since that time, what was deemed repairs: This roadway was deemed repairs, and has been the work of many years. It was not all built, undertaken and finished at once. I understand the board of trustees consider anything entirely new was improvements, and other improvements were deemed repairs. We estimate our repair fund at \$9,000 for the next two years.

The reason that there was an indebtedness two years ago and not reported, was outstanding liabilities not reported by the steward, and not paid. In the purchase of supplies for the institution: I am accustomed to order for the drugs myself, as the steward is not acquainted with drugs, etc.; I attend to this purchase myself, as I am acquainted with the quality, etc.; I make the purchase of the drugs in Henderson's name. I purchase the most important class of drugs in Brooklyn, New York. The item of hardware is composed of knives, forks, screws, nails, and everything on hardware shelves. The account of paint and oils comes out of expense account fund. The lumber account is charged to repairs. I have ordered these repairs myself, without the order of the board of trustees, excepting the larger and more important items. I purchased iron guards for the windows. Mr. Fellows called my attention to it, and said he thought I ought to have consulted the board of trustees. The board audited the bill for the window guards. Quite a large number of the window guards were frail, and a large number were broken, and patients have broken them out and got away; and I thought that the iron guards should be replaced by a better pattern, that were heavier than the old ones; and since we have had new guards no one has escaped. The voucher for interest allowed myself was paid as interest for money loaned the treasurer of the institution, and he gave me state warrants as security; I was allowed ten per cent interest. I sold some of the securities I held of my own to obtain money to loan the treasurer; the securities I sold amounted to some \$6,000. It was difficult to negotiate state warrants, from the fact

we could not say positive when they would be paid. The warrants I held were drawing interest, but I never received any of the interest on the warrants held. The treasurer collected the warrants when he got them cashed. In my opinion it is an embarrassment to draw money quarterly, instead of monthly. I think it would benefit us if the law was changed. The reason the treasurer's report shows so large amount paid as interest was, that we had to borrow money on the warrants to run the institution. It costs us no discount to get our warrants cashed now, money is more plenty. So far as I am aware the appropriations were expended for the specific object appropriated for. The current expense fund has not been expended for improvements. There has been no diversion of any funds from the specific purpose for which it was drawn out of the state treasury.

MARK RANNEY, *Supt.*

#### TESTIMONY OF J. W. HENDERSON.

Name: J. W. Henderson; residence, Mt. Pleasant, Iowa; occupation, steward of the hospital. I have been steward since two years ago last September. My duties are to purchase supplies, stock, and all other goods for the institution, except drugs; Dr. Ranney purchases the drugs. I purchase the supplies mostly on my own judgment. I derive my authority from instructions from the board of trustees and superintendent. When I first came here the beef and mutton was purchased by contract for the use of the institution. It was talked over, and it was thought best to advertise for a supply of cattle for the use of the institution. When we received the bids and examined them we found the bids were too high, and we bought stock and slaughtered them as needed; and trustees told me to go ahead and follow this plan. The groceries are purchased at wholesale in Chicago, Burlington and at other points; we pay cash in thirty days; but in groceries we get no discounts; but on dry goods we get the discounts. My authority for buying these supplies are derived from the by-laws (marked Exhibit L) of the institution, made by the trustees. The memorandums in the requisition book are made by myself, Dr. Ranney and Mrs. Ranney, and then examined by Dr. Ranney, and if he approves of the articles and signs the requisition I make the purchases. When goods are bought the bill is sent to me, and I pay the bill by exchange. The bills are not audited by the trustees before paid, but at their quarterly meeting the bills come before them and they are



then audited. I get the money to pay these bills from the treasurer. The board of trustees never refused to audit and allow my bills for purchases on account of the institution. I make the purchases of hardware, paints, etc. I made purchases of iron for the new boiler. Dr. Ranney had received bids from different parties, and when it was decided to purchase this iron Dr. Ranney told me to take the estimates, and when I went to Burlington to go and see Donahough & McCosh. I found I could do better there with them, and then bought the iron from them.

I have sold a number of tierces of lard for account of the institution. I give bond for five thousand dollars to trustees, and they approve; I am elected for one year. The hats, collars and suits of clothing are bought as needed for the patients. None of the attendants ever receive any clothing from the institution; we never sell anything to any of the attendants in way of clothing, dry goods, or anything else.

*Question.* How do you explain the discrepancy between your account and the treasurer's account on the first of last October?

*Answer.* The reason there appears a discrepancy between my report and the report of the former treasurer, I would say there was due from the State twenty-two thousand three hundred and eighty-four dollars (\$22,384), and we had credited the State with full amount due on support funds to October first, twenty-two thousand three hundred and eighty-four dollars (\$22,384), and there was unpaid of this amount to different parties, \$5,884.36 (five thousand eight hundred and eighty-four and thirty-six one-hundredths dollars); and then there was due the treasurer what he had advanced on current expense fund, \$3,595.67 (three thousand five hundred and ninety-five and sixty-seven hundredths dollars). These two items deducted from the full amount credited the State will show the balance shown in my report, of \$12,903.97 (twelve thousand nine hundred and three and ninety-seven hundredths dollars).

I could not give cost of the iron without the bills, of iron that went into new boiler; believe the boiler cost about \$2,000 (two thousand dollars). I draw all orders on the treasurer; paid the interest on loans, and afterward drew orders to correspond.

J. W. HENDERSON, *Steward.*



## TESTIMONY OF SAMUEL KLEIN.

FEBRUARY 11, 1880.

Name: Samuel Klein; residence, Keokuk, Iowa. I am one of the trustees of hospital for the insane, located at Mt. Pleasant, Iowa. I have been trustee of the hospital three years. The new boiler at the hospital was built on the recommendation of Dr. Ranney and board of trustees. The cost of the boiler was paid for out of current expense fund. I don't remember whether trustees asked the legislature for appropriation for new boiler. The question of new boiler was called to the attention of the trustees; I remember we had quiet a discussion in regard to the boiler and road outside of hospital gate. We asked Mr. Fellows to look up the law; he done so and afterward recommended us to build the boiler. He being a lawyer we thought he would know more about the law than we did. He recommended and said we could take the support funds to pay for the boiler as the construction was an absolute necessity. I do not think we as trustees had authority to construct a boiler without an appropriation from the legislature. If it had not been a matter of necessity, I would not have taken responsibility of going outside of the law. I know Mr. Branagan; I think he had a patent on the boiler constructed at Mt. Pleasant; I don't know how much was paid Mr. Branagan for building the boiler. I don't know how much was paid Branagan as traveling expenses; I don't know what he was paid per day as compensation. We the trustees examine all the bills of every character and do cut down some of the bills; we examine all bills and audit them. When I came on the board this road outside of hospital gate was being agitated before the board of trustees.

I saw the officers of the C., B. & Q. Railway Co. and they agreed to put in a switch for the use of the hospital. We paid for the macadamizing of road from hospital gate to railroad switch out of the general expense funds of the hospital. The question of legality was discussed in the board same time we talked about the boiler. The road was a necessity and I justify my action as necessity demanded the board of trustees to build the road. I did not think I was doing anything unlawful; I don't now what the road cost.

The board of trustees have of late for the last two years drawn full amount of support funds due the hospital. Money got scarce and we

could not get anyone to take the warrants. I myself tried to get our banks in Keokuk to take some of these warrants, but the banks refused as they could not tell when the warrants would be paid. I think there was twelve thousand dollars (\$12,000) in hand of treasurer of the hospital October 1st. At our January meeting of the board of trustees I think there was drawn from the State between twenty and twenty-one thousand dollars; it was at the rate of fifteen dollars per capita. I don't know if we had drawn full amount for the quarter from the auditor of state; I think the treasurer of hospital or those parties he negotiated with always had warrants indorsed.

I don't know the reason the treasurer drew full amount of warrants the hospital was entitled to, and have warrants indorsed to draw interest. I don't know that the treasurer did draw full amount of warrants and have them indorsed for the purpose of drawing interest. I don't know of any difficulties between the board of trustees and superintendent. We, the board, don't always indorse all the superintendent's requisitions as regards to expenditures. I regard the superintendent as a man who is very economical for the institution. I know we had a man to superintend the work on the sub-basement at a cost of five dollars per day. Dr. Ranney said it was no use for the trustees to employ this man, as he himself could superintend the stone work, and save the hospital the five dollars per day. We discharged the man, and Dr. Ranney acted in his place and saved to the hospital over two hundred dollars. We had to borrow money because we could not get our warrants cashed; and the officers and attendants wanted their salaries when due. I don't know anything of this account of interest on borrowed money, only what I have seen in treasurer's report. I cannot tell why the hospital at Independence can run at a less amount per capita than the hospital at Mt. Pleasant; think repairs would make the difference in cost per capita between the two hospitals. I did not know that there were any differences between the trustees, and only knew that there would be a minority report when I saw it. Dr. Cleaves said she could sign the majority report all except one clause, and that was the objection of the enlargement of the hospital. Dr. Cleaves signed the majority report, and afterward she wrote to the president of the board of trustees that she wanted her name erased from the report. The trustees have acted in harmony up to about one year ago.

The board of trustees all agreed upon all accounts against the hospital. Since the board of trustees have had the new appointment there has

not been the same unit of action in the board of trustees as before. Didn't know of any difficulties or underground feelings in the board of trustees until I saw the minority report. I don't know of any ill feelings on part of any of the trustees toward any of the officers of the hospital. Never heard any threats on part of any trustees against any of the employes of the hospital.

When the new boiler was built the estimates for boiler were laid before the board of trustees. Mr. Branagan said he lost money in building the boiler. I never heard Branagan came from Texas; don't know how much he was paid per day. I generally made it my business to look over all bills for supplies and pay-roll of employes. The necessity of constructing the boiler was not laid before the executive council that I know of. I cannot account for the reason that we have to borrow money and Independence hospital don't have to borrow money. Think we had different class of patients; some more violent and destroy more clothes, bedding, etc. The item of tramway and flagging was an item of absolute necessity; think it was both repairs and improvements. These items mentioned were paid for out of the support fund. I think Dr. Ranney was authorized by the board of trustees to build this tramway. I would not take money out of support fund for improvements, but think we were justified, as it was a necessity. I cannot say the board of trustees or the treasurer had legal authority to borrow money; I am not acquainted with the law.

The appropriations made by the legislature two years ago have been expended for the purposes appropriated for. There has not been any money diverted from the original purpose for which it was specifically appropriated for. The money matters of the hospital were always left to the president of the board of trustees and the treasurer. I didn't know that there was a debt against the institution two years ago. Dr. Ranney, when we re-elected him last year, was to receive the same salary as we had formerly been paying him, three thousand dollars per annum. After being re-elected he (Dr. Ranney) appeared before the board of trustees and voluntarily reduced his own salary two hundred dollars per annum, making it twenty-eight hundred dollars per annum.

SAM'L KLEIN.

## TESTIMONY OF D. D. DAVISSON.

Name: David D. Davisson; residence, Winterset, Iowa. I am a member of the board of trustees of the Mt. Pleasant Hospital for Insane, located at Mt. Pleasant, Iowa. I was elected a member of the board of trustees at meeting of seventeenth general assembly. I personally cannot tell anything about the new boiler; was not present when order to build boiler was made. I don't know anything about cost of the boiler; it was paid for out of current expense fund. The legislature had been asked for an appropriation to build a new boiler, I think. I am of the opinion it could not be paid for legally out of the current expense fund. I differed with balance of the board in regard to this. I think the law would not warrant its being paid for out of expense fund. It was a necessity to have this boiler; the wards were not warm enough sometimes, and if one of the old boilers had at any time given out or got out of repair, it would have left the hospital in bad shape. Mr. Branagan built the boiler. Don't know where he lived. I don't know how much was paid Branagan as compensation for his services to build the boiler. No question ever arose at a meeting of the board as to the amount of expenses or traveling expenses paid this man Branagan to build this boiler.

The road outside of hospital gate to railroad switch was greater part done before I became a member of the board of trustees. This road matter came before the board the first meeting I attended. It was asked if we would authorize the superintendent to go ahead and finish the road. I said I would not vote for it, and could not give my consent to take money out of the expense fund to finish this road. It was not brought to a vote when I said I would not vote for it. There has been work done at the road since, and the work was paid for out of the expense fund. I, as a member of the board of trustees, say it was unlawful to take money out of the expense fund and pay for this road. The executive council never had their attention called to this road as I know of, and of my own knowledge I know nothing about it. This tramway in the market place was paid for out of current expense fund. Think it could not legally be taken out of that fund. Don't remember of its being discussed in the meeting of the board. It was put in under head of repairs, and superintendent done so without an order of the board of trustees.

I have been in attendance at all meetings of the board of trustees since having been elected, except once. We have a finance committee, and they look over all the accounts. All expenditures have been paid for by order of the board of trustees. All bills against the hospital are made and paid and receipted for before acted upon by the board of trustees. The iron window guards were built and paid for by the superintendent, when the board met. If the bill had not been paid it would not have been allowed. I and another member of the board of trustees regarded it as not legal. The bill for the window guards was paid for out of current expense fund. I was generally alone as to the question of legality of repairs being paid out of expense fund. The superintendent is in the habit to some extent, and it is absolutely necessary to make some of these repairs without the consent of the board. I never could find any fault with anything Dr. Ranney has done in regard to repairs. I regard Dr. Ranney as a man who thinks it economy to do a thing right, and he does it as cheaply as possible. The appropriations made two years ago by the legislature have been expended for the purposes appropriated. The funds appropriated for specific purposes have not been diverted from the purposes appropriated for. The board had their attention called to the use of the current expense funds by the governor, and this was the reason other members of the board of trustees would have refused to allow the bill for window guards, if the bill had not been paid. I was elected trustee by the legislature.

D. D. DAVISSON.

### TESTIMONY OF L. E. FELLOWS.

FEBRUARY 12, 1880.

Name: L. E. Fellows; residence, Lansing, Iowa. I am one of the trustees of the Hospital for Insane located at Mt. Pleasant, Iowa. I have been trustee of this hospital since July 4, 1872. I was a member of the board when the road outside of hospital gate leading to railroad switch was built. There had been a great amount of annoyances and difficulties in hauling from the depot to the hospital. Some of the members of the board saw the railroad officials and they agreed to put in the side track. The road leading from switch to hospital gate was in such condition that it was almost impossible to haul stores, etc., over it to the hospital. The superintendent, at the meeting, asked for an order to macadamize the road. The board refused the order,

but authorized him to repair the road by using waste material lying around the hospital. That was the only order given to build the road. Dr. Ranney, under this order to repair the road, went on and finished the work, and the bills were brought to the attention of the board of trustees at their meeting, and they were ordered paid. The boiler was built by order of the board of trustees, and all the trustees were satisfied that it was necessary to have a new boiler to keep the inmates comfortable, and another boiler was necessary. The question then arose as to the authority of the board of trustees to order the boiler built. I considered it our duty to provide, and the trustees all agreed to the necessity, and the board took the responsibility to order the construction of the new boiler. There was a resolution introduced, and the records will show, that the boiler was built by order of the board. (Original copy introduced and read by Mr. Fellows, marked Ex. A.) This is in my handwriting, and upon this resolution the board took action and ordered the boiler built. I never in any sense considered myself as the legal adviser of the board of trustees. The pay for this boiler was taken out of the general expense fund. I regarded this boiler as a matter of necessity, and should say we had authority to pay for the boiler out of general expense fund. The board of trustees have asked the legislature for an appropriation to build a new boiler, but the appropriation was not made. The matter of the road was never referred to the executive council. When matters of doubtful legality would come up before the board, it never was, to my recollection, brought to the attention of the executive council. When the fire took place at the hospital we drew the attention of the executive council to the fact and received five thousand dollars from providential fund. I think that the flagging in the basement, the road from the hospital gate to the railroad switch, and the building of the boiler could legally be taken from the current expense fund. I may be wrong in my opinion; can only say I used my honest judgment in regard to it. The board of trustees never ordered iron window guards. I at my last visit to the hospital noticed a large number of iron window guards. They might have been ordered at the former meeting of the board; but I was not present at that meeting. In looking over the bills, I laid this bill out and said I didn't think it was necessary to purchase these guards. The bill was paid, and had to be paid before we had it presented to us. The bills of the hospital do not come into the hands of the trustees until after they are paid. The law makes the steward

the purchasing officer. I mean by the laws, the statutes of the State, not the by-laws of the hospital. The board of trustees gave the superintendent to understand that we didn't deem purchases of window guards necessary. I didn't at that time think the bill for window guards could legally be paid out of current expense fund, and didn't think them a necessary current expense at that time. I don't remember the cost of the window guards. Don't remember who built the boiler. Cannot remember anything about paying any expenses for a man coming from Texas to build this boiler; don't remember any bill for this item. The treasurer has obtained money either by discounting warrants or by borrowing money on the warrants at 10 per cent interest, and when warrants were paid we collected the 6 per cent interest from the State on warrants held by the hospital. It was always understood that the treasurer should correspond with the state auditor and treasurer and call their attention to this matter, and he did so several times. I don't think the matter formally was ever called to the attention of the executive council, of the hospital being out of money. The state auditor, treasurer and executive council have never objected to this item of interest paid by our treasurer. The executive council never had their attention called to the affairs of the hospital, as far as I know of. The trustees never had their attention called to the management of the hospital by any state officer only once, and that was by a letter from Governor Gear to the president of the hospital. (Marked Ex. B and C.)

The interest was paid out of the current expense fund. I don't know of any law that would lawfully allow the trustees to borrow money on account of the hospital. Mr. Klein and Mr. Whiting, with the superintendent, were selected as an improvement committee, and they superintended general and special appropriations for the hospital.

In the biennial report two years ago it came to the attention of the board that there were some outside bills standing, and an order, I think, was made that the books should be kept so as to show bills unpaid. I was not aware that there was a debt against the hospital for money borrowed, at the last report. I did not know that the treasurer had borrowed ten thousand dollars from Dr. Ranney. I have known of the treasurer borrowing money from officers and attendants of the institution. I did not attend October meeting, 1879. I did not see the majority report until I saw it in print. At the July meeting it was suggested that there be prepared a list of amounts for improvements, etc., to be asked for from the legislature. At this meeting it



was concluded that the board of trustees would not recommend, but that we would let it lie over until next meeting and then agree as to the amount to ask for from the legislature. I have always insisted upon making appropriations as reasonable as possible, and not leave it for the legislature to cut down, but intended to only ask for amounts to be appropriated that the hospital needed. I expected to be at the next meeting of the board of trustees and there make my objections.

Immediately after the October meeting I received a letter from the secretary of the board of trustees with a copy enclosed of the different amounts asked to be appropriated, and more especially the enlargement of the hospital. She in her letter said she had signed the majority report, and the more she thought of it the more dissatisfied she was with the action of the board present at the meeting. She (Dr. Cleaves, the secretary of the board of trustees) asked me if she had authority to withdraw her name from the majority report. I answered her, and said she had. I wrote to the president of the board of trustees, Mr. T. Whiting, and asked him to send me a copy of the majority report. He didn't send it to me. I then immediately drew up the minority report. There have been no differences amongst the trustees, no personal differences, except such as would naturally grow out of the differences in regard to these two reports. I cannot see that it should have any damaging effect upon the hospital by having two reports come from the board of trustees to the general assembly. I say frankly that by having a majority and a minority report in regard to amounts asked for come to the attention of the general assembly, they would not be likely to make so large appropriations. There have been differences amongst the trustee upon minor questions. The policy has been, by common consent, to talk all matters over and then the majority should decide the matter and the minority should acquiesce and go right along with the majority. So far as outward conduct would show, I have seen no indications of any ill feelings on the part of any of the trustees toward the superintendent. I don't think the most cordial feelings exist between Dr. Cleaves and Dr. Ranney, the superintendent.

The appropriations made two years ago have all been expended exclusively for the objects appropriated for. There has been no money diverted from the original purpose appropriated for. There have been no debts contracted in excess of amount appropriated for, to my knowledge.

L. E. FELLOWS.



## TESTIMONY OF DR. M. A. CLEAVES.

FEBRUARY 12, 1880.

Name: Dr. M. A. Cleaves; residence, Davenport, Iowa. I am one of the board of trustees of Hospital for Insane located at Mt. Pleasant Iowa. I have been a member of the board of trustees since October 1st 1878. I was appointed to fill a vacancy on the board. I was a member of the board when the new boiler was constructed. It was built by order of the board of trustees. It was decided by the board that the boiler could be paid for out of the support fund. We were of one mind as regards the construction of the boiler. Mr. Branagan constructed the boiler. He was paid six dollars per day and his expenses from Texas. There was no action taken by the board of trustees in regard to paying his expenses from Texas. The superintendent was authorized to superintend the construction of the boiler. The road outside of the hospital gate to railroad switch was undertaken before I became a member of the board, it was paid for out of the expense fund. This matter was done before I became a member of the board. The flagging in market place was not done while I was a member of the board; to the best of my recollection it was paid for out of the expense funds. I think it was done before I was a member of the board. The board have borrowed money since I have been a member of it. No order was made by the board of trustees in regard to borrowing money. I am not aware of any law authorizing the board of trustees to borrow money. The bill for the window guards was between three and four hundred dollars. The window guards were not ordered by the board of trustees and we did not know of it until the January meeting; they were paid for out of expense funds. I objected to them on two grounds. first they were not needed and second they could not be paid for out of expense fund. These items of repairs such as flagging, iron guards, and some minor repairs are not ordered by the board. They are ordered by the superintendent. The superintendent makes a quarterly report to the board of trustees, bringing in his recommendations to the board. I don't think the superintendent is extravagant in his management. What he has done he believes in having it well done.

The treasurer has paid Dr. Ranney interest since I been a member

of the board of trustees. I have understood Dr. Ranney loaned money to other parties besides the hospital. I was assistant physician from 1873 to 1876 at the Insane Hospital located at Mt. Pleasant, Iowa. Dr. Bassett was superintendent two years. Dr. Bassett was requested to resign his position by the trustees of the hospital. There was trouble in the institution, before Dr. Bassett resigned, in regard to the treatment of the patients and general management of the inmates. The action of the board was not unanimous in requesting Dr. Ranney to return and take charge of the hospital; one trustee voted against it. There was not harmony of action between Dr. Ranney and his assistants; Dr. Ranney and Bassett always got along nicely together. The differences between Dr. Ranney and myself was that I would not occupy a position were I could not do efficient work. I resigned my position at Mt. Pleasant hospital. Never any trouble between Dr. Ranney and myself; never any words or anything of that sort. Dr. Ranney never, as I know of, said to anyone my resignation would be desirable. At the time I left the institution there was no unpleasant feelings between Dr. Ranney and myself, as I know of. I was always willing to occupy my position.

During Dr. Bassett's superintendency I had almost entire supervision of the woman's department of the hospital. When I left the institution I had no ill will towards Dr. Ranney; I did not express any threats against Dr. Ranney; I never said I would get even with him and have him removed from his position. The assistant physicians don't prescribe for the patients, the superintendent does that. Dr. Ranney thinks that all medical and moral care of the patients should be exclusive in his care. The differences between myself and Dr. Ranney never influenced my action as trustee. When we had our biennial meeting I told the members of the board of trustees that I could not sign the report. I said I could not recommend additional enlargement of the hospital. I was finally prevailed upon, against my better judgment, to sign majority report. The minority report was afterward sent me, and I was asked if I could sign it. I answered that I could, and did sign it. My name was withdrawn from the majority report after I left Mt. Pleasant. I consulted Mr. Fellows, and he said I had a right to withdraw my name. I wrote to the president of the board of trustees, and my name was withdrawn from the report. My best judgment, and that upon reflection, was expressed in the minority report. In my letter of October 24, 1879, (marked Exhibit D) I en-

closed a slip of paper, saying to the president of the board of trustees I could sign the majority report with the exception of one clause, and that was enlargement of building. I afterward wrote saying I could sign the report as a whole. I indorsed the majority report because I didn't know there would be a minority report. I afterward received minority report and signed it. I don't know from who the governor got his knowledge in regard to the items mentioned in his message. I never had any correspondence with the governor in regard to anything contained in his message. I was appointed by Governor Gear to fill a vacancy on the board of trustees. I never saw Governor Gear until two weeks ago. I was appointed to the position through the influence of my friends in Davenport, Iowa; they are acquainted with Dr. Ranney, and are his friends. The only interest I had in obtaining this appointment, was the interest I had in my profession, and more especially in insane patients. I take an interest in all our State institutions, and more especially in the institutions for the insane.

When I go to Mt. Pleasant in an official character, Dr. Ranney passes the time of day with me, nothing more. I was present at the January meeting of the board. At the meeting an order was made reducing the support funds. The estimate was at \$16.00 (sixteen dollars) per capita; the board of trustees reduced it to \$15.00 (fifteen dollars) per capita. I don't think it is necessary to have a difference in support funds between Mt. Pleasant and Independence, per capita. There are two hundred more patients at Mt. Pleasant than there ought to be. It may increase the cost per capita from having the hospital overcrowded. I would advise that instead of increasing the capacity of the hospital, we should build an institution for incurable patients, at about a cost of from two hundred and fifty to three hundred dollars per bed; a separate institution altogether, in a different location. And another objection to enlargement of the present hospital would be the want of water supply. It cost a large sum of money to clean out the settling pond at Mt. Pleasant. It was necessary last summer at Mt. Pleasant to forbid the bathing of the patients on account of shortage of water supply. There are several wells on the premises, but for drinking purposes the well in front of the hospital is mainly depended upon. The work of cleaning out settling pond was in progress when I first became a member of the board. The artesian well on the premises is not used. The unpleasant manner of the superintendent toward his subordinate officers may be the result of long years of contact with per-

sons not capable of exercising self-control. I never had any trouble with Mrs. Ranney. My relations with all the attendants at the hospital were always pleasant, and never had any trouble with anyone of them. There was frequently some difficulties between myself and the apothecary, but I attributed his actions to his frequently drinking. I never allowed my personal feelings to influence my action as a member of the board of trustees; I am certain I could, being a member of the board of trustees, do Dr. Ranney justice. No matter how good my motives were, think they might be misconstrued. Think it would be to the benefit of the hospital if Dr. Ranney was removed from his position, provided the trustees were satisfied a better man could be obtained. While a minority of the board of trustees thought it would be best to have a change in the management of the institution, a majority were in favor of retaining Dr. Ranney, and the minority said nothing about it. Dr. Ranney, I think, would have made a splendid architect, he enjoys attending to everything. The other member of the minority, besides myself, was Mr. Fellows. A younger man, one more liberal and progressive in his management, and more social in his intercourse with his associates, would be a benefit to the institution, in my judgment. I think that there has been a diversion of funds from support funds: such as railroad in basement, flagging, iron window guards, and road outside of hospital gate.

I have told Mr. Fellows of the questions that were asked of me when I was a member of the institution, and he is the only person I have talked with in regard to my testimony before this committee. I never knew the building of the road from hospital gate to railroad switch was authorized.

M. A. CLEAVES.

### TESTIMONY OF E. G. MORGAN.

FEBRUARY 12, 1880.

Name: E. G. Morgan; residence, Ft. Dodge, Iowa. I am one of the board of the board of trustees of the Insane Hospital, located at Independence, Iowa. I am president of the board of trustees. I am acquainted with the financial management of the hospital. The board of trustees meet and make requisitions on the state auditor, and at the quarterly meeting of the board fix the rate to be drawn per capita. At the meeting of the board of trustees held June 6, 1878, the board fixed the rate per capita at twelve dollars for the quarter. At the

meeting October 4, 1878, the rate per capita was sixteen dollars for the the quarter. At the meeting April 2, 1879, the rate was fixed at twelve dollars per capita. At the meetings of the board held July 3 and October 3, 1879, the board fixed the rate at ten dollars per capita. At the meeting of January 4, 1880, the rate per capita was also fixed at ten dollars.

We would draw our warrants and get the interest on them. The warrants would be increased by the amount of interest on them. This is where we would get our surplus. Our treasurer, Mr. Donnan, would draw on the auditor of state, and tell him to draw the warrants in such amounts as the institution could use, and the treasurer would let different parties have them. If we had a surplus of warrants on hand our treasurer would go to the First National Bank and get cash on them. We could get warrants cashed at par one year ago. During the last biennial period the hospital has not been able to get cash from the state treasurer; could not get the state treasurer to cash our warrants. The state auditor allowed Mr. Donnan to collect hospital dues from two neighboring counties. We have bought dry goods from Messrs. Field, Leiter & Co., and would obtain from the state auditor a warrant for the amount of the bill due Messrs. Field, Leiter & Co. The treasurer would send the warrant to them and they would receive it from the hospital as cash. We have paid our coal bill in state warrants. We have paid our superintendent in state warrants.

The board of trustees meet quarterly. During this biennial period we have got warrants cashed at par. We buy beef cattle at the end of each quarter. We bought clothing, dry goods, etc., at the end of each quarter. We always got the discounts off of all bills when we paid bills in state warrants. All the warrants we pay out as cash are indorsed by the state treasurer. During the latter part of 1877, do not think we discounted any warrants. The Independence hospital has not, during the last two years, paid any interest or discounts except as shown in the treasurer's report.

I consider fourteen dollars per month per capita enough to support the insane hospitals, provided you give us contingent fund for repairs and improvements. We (the board of trustees of the hospital at Independence) have talked over as to what would constitute repairs and improvements. We have bought a car load of stone and paid for it out of current expense fund. This stone was used upon state grounds to build a culvert in the road leading from the hospital to the depot.

If a horse should drop dead that belonged to the hospital, and we should be compelled to purchase another, then we would pay for the horse out of the current expense fund. If a boiler was to blow up or explode, or a new one was needed, we would ask the executive council or telegraph to the governor before we would undertake to replace the same and pay for it out of the current expense fund.

We have given the superintendent authority to make minor repairs. We have purchased a new stove and paid for same out of current expense fund. I don't think the treasurer ever disposed of any warrants at a discount. I don't know of any law that would authorize the board of trustees to borrow money and pay interest on the same.

E. G. MORGAN.

### TESTIMONY OF DR. A. REYNOLDS.

Name: Dr. A. Reynolds; residence, Independence, Iowa. I am the superintendent of the Hospital for the Insane located at Independence, Iowa. I have been superintendent of that institution seven years. State warrants, when not at par, have been used by our institution in paying for stores purchased for the use of the hospital. State warrants now are the same as money, and our hospital uses them or disposes of them at par. Some time ago state warrants were selling at 2 per cent discount. Our creditors would sometimes grumble at having to take warrants, but we used them as cash. We always got the discounts on our purchases. Think we bought as cheap with warrants as with cash. I don't know of the treasurer ever borrowing any money for the institution. We arrange to have our bills come due near the end of the quarter, and also purchase our goods near the end of the quarter, and have supplies on hand for next quarter. We have had a surplus of supplies on hand at the end of each quarter.

The salaried officers and all of the employes of the hospital are paid quarterly, and some of them ask for their pay in state warrants. We have used a considerable number of state warrants in the last year as cash. The warrants are always drawing interest. Our hospital has had some cash out of the state treasury. We have had some cash from the treasurers of our own county and Fayette county. Our hospital has drawn (\$16) sixteen, (\$12) twelve and (\$10) ten dollars per capita during the last biennial period. We have drawn ten dollars per capita per quarter for the last six or nine months. Would say Mt. Pleasant hospital pays sixteen hundred dollars more in salaries, and

pays higher salaries, and has employed more attendants at higher salaries, has paid several thousand dollars more in repairs. The difference in the cost of gas would account in part for the difference.

In the cost per capita between the hospital located at Mt. Pleasant and hospital at Independence: At Mt. Pleasant they have one more assistant physician than at Independence, and a chaplain that we have not at Independence. Dr. Ranney is regarded as authority in his specialties and treatment of insane persons. There are more patients at Mt. Pleasant than at Independence. We have seventeen wards at Independence; will have twenty-two wards when all the buildings are finished. One section of our wards is larger than those at Mt. Pleasant. I should think that the amount of repairs would be larger in an old institution than in a new one. The repairs and improvements necessary at Mt. Pleasant would be greater than at Independence. Most of the injury done by the patients can be repaired by the hospital carpenters. The ordinary repairs are done under my orders and directions. Any repairs requiring a large outlay are required to be done on an order from the board of trustees only. I would consider improvements the purchases of new material, such as putting up a new fence, improvement of ventilation, purchase of a new boiler, etc.

Last summer we deemed it necessary to make large repairs upon old boiler. It was done, and paid for out of the current expense fund. It is the custom of the trustees never to make any improvements and charge the same to, or pay the same out of, the current expense fund, unless it was deemed an absolute necessity.

It is my recollection that the executive council were applied to for money to complete the well on the premises. The trustees have expended money and have purchased stone to build a culvert on the road leading from the hospital to the depot. The stone cost about twenty dollars, and was paid for out of current expense fund. When the teams belonging to the hospital were not employed upon the farm, a great deal of labor was done on the road leading to the depot by the teams and inmates of the hospital.

When the board of trustees are not in session the management of the hospital is in my charge. The steward has exclusive charge of the hospital farm. I never make any extensive repairs without the order of the board of trustees. I visit all the wards and patients once a day. I do not ordinarily prescribe for any of the patients alone; I consult with my assistant. I see all the sick every day. We have four hundred and fifty-four patients now in the hospital.



I think the difference between the salaries of officers and employes and number of attendants, cost of gas and repairs, salaries of officers and pay of employes, would account for the difference of expense between Mt. Pleasant and Independence. I do not think that they have a more violent class of patients at Mt. Pleasant than we have at Independence. The patients were removed from Mt. Pleasant to Independence according to territory agreed upon by the governor and the superintendents of both hospitals. In my opinion, it would not be economy or justice to reduce the amount per capita below sixteen dollars per month. With present prices, I believe fourteen dollars per capita will answer the requirements.

I think that our requisitions should be allowed monthly by the State. There is a visit from part of the trustees every month to the hospital. We purchase our groceries in Chicago and Dubuque, and are in the habit of paying for the same in warrants of the State.

It is frequently difficult to tell where repairs cease and improvements begin.

A. REYNOLDS.

#### TESTIMONY OF HON. JOHN H. GEAR.

Name: John H. Gear; residence, Burlington, Iowa. I am chief executive officer of the commonwealth of Iowa; I am chairman of the executive council. I know of no reason why the hospital for the insane at Mt. Pleasant could not be conducted as economically as the hospital at Independence. The amount expended for repairs, permanent improvements and interest at Mt. Pleasant is about twenty-six thousand dollars (\$26,000), on a disbursement of two hundred and eleven thousand dollars (\$211,000), or nearly one-eighth of the whole sum; while at Independence the amount paid for repairs is only about five per cent on a disbursement of one hundred and thirty-nine thousand dollars (\$139,000). In my opinion the hospital at Mt. Pleasant should be maintained at slightly less rate per capita than the one at Independence.

*First*—Independence is nearly two degrees north of Mt. Pleasant, and the average temperature of the weather is much colder than at Mt. Pleasant, and of course takes more fuel.

*Second*—Coal is considerably cheaper at Mt. Pleasant than at Independence.



*Third*—A larger number of persons should be supported at a less cost per capita than a smaller number.

I consider it an absolute violation of the law for state institutions to borrow money; I fail to find any law to justify it. It has been customary for state institutions to sell state warrants. The only state institution that paid any interest, that I know of, was the institution for the blind, located at Vinton, Benton county, Iowa. I don't think the road outside of hospital gate leading to railroad switch, new boiler, iron guards for windows and flagging, are repairs.

I know nothing about a road outside of hospital grounds being built at Mt. Pleasant, or a new boiler being built at hospital for insane at Mt. Pleasant, only from examination of vouchers on file in the auditor of state's office. The construction of boiler and road, the flagging and iron window guards, I consider permanent improvements.

The Code of 1873 forbid the trustees to make permanent improvements; and the general assembly passed a resolution making it a misdemeanor to make permanent improvements and pay for same out of support funds. I know of no differences between the board of trustees of the Mt. Pleasant hospital, except as shown in the minority report of trustees. The board of trustees of Mt. Pleasant hospital have never notified the executive council of any repairs needed by the institution, or never applied to the executive council at any time.

I didn't know that there was an accrued interest account against the Mt. Pleasant hospital two years ago; I didn't know of any indebtedness against the institution two years ago. I don't know, as far as my knowledge goes, of any discrimination on part of the state treasurer against the Mt. Pleasant hospital, or in favor of any state institution. The institution at Mt. Pleasant being old, and Independence being a new institution, I think the item of repairs would be larger at Mt. Pleasant; larger salaries to officers and attendants, larger number of attendants, etc., would have a tendency to increase cost per capita at Mt. Pleasant hospital.

JOHN H. GEAR.

TESTIMONY OF GEO. W. BEMIS.

Name: Geo W. Bemis; residence, Independence, Iowa. I am treasurer of the State of Iowa.

*Question.* What was the amount of interest paid on state warrants issued to the Hospital for the Insane located at Mt. Pleasant and at Independence, Iowa, during the last biennial period?

*Answer.* There was redeemed warrants issued for the Mt. Pleasant hospital for the biennial period commencing October 1, 1877, and ending September 3, 1879, as follows:

Warrants redeemed .....	\$258,263.90.
Interest paid on warrants.....	\$4,296.61.
Number of warrants issued, 162.	
Paid M. L. Edwards, treasurer of Mt. Pleasant, on warrants before indorsed:	
May 4, 1878.....	\$1,150.00
July 9, 1879.....	\$22,988.00
Total.....	\$24,138.00
Independence hospital, W. G. Donnan, treasurer, for same period:	
Warrants redeemed.....	\$129,081.93
Interest paid on warrants.....	\$1,096.06
Number of warrants issued, 318.	
Paid W. G. Donnan, treasurer of Independence, on warrants before indorsed:	
April 8, 1879.....	\$5,899.04
July 5, 1879.....	\$10,800.00
Total.....	\$16,699.04

*Question.* So far as you are aware has there been any difference in the treatment of the two institutions in issuing or cashing warrants at the state treasury?

*Answer.* There has been no difference.

## EXHIBIT A.

WHEREAS, We regard it as a matter of necessity to have an additional boiler for the purpose of properly heating the hospital, and also as a matter of safety and economy, and believing that the current expenses would be soon sufficiently lessened to cover the expense of a boiler; therefore,

*Resolved*, That the superintendent be authorized to have a boiler constructed, utilizing the labor at the hospital as far as possible for that purpose.

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## EXHIBIT B AND C.

(COPY.)

EXECUTIVE OFFICE, May 21, 1879.

*T. Whiting, President, Mt. Pleasant, Iowa :*

DEAR SIR—Some time ago I addressed a letter to Dr. Mark Ranney, requesting him to advise me how much, if any, of the support fund of the Iowa Hospital for the Insane at Mt. Pleasant had been used for purposes other than support.

I am free to say that I am shocked to find, according to his letter to me, that there has been expended a large sum from the support fund for boilers, flagging, and other matters, which in my judgment is in direct and clear violation of the law enacted by the seventeenth general assembly. It is not my purpose to discuss the question as to the apparent or real necessity of the improvements made at the hospital, but simply to say to you that I shall report the same to the general assembly and ask them to take such action as their judgment shall dictate.

It looks to me very much as if the board of trustees had turned over the matters pertaining to the hospital to Dr. Ranney to manage, and to expend the support fund at his pleasure. Whenever he thinks an improvement should be made, it would seem that it is done, either by consent or the implied consent of the board. I call your attention to this matter, and through you to the other members of the board. It cannot and will not be permitted, and if persisted in will work serious injury to the institution and to the reputation of your board.

Yours truly,

JOHN H. GEAR.

MT. PLEASANT, IOWA, May 23, 1879.

*Hon. J. H. Gear, Des Moines :*

DEAR SIR—Yours of the 21st inst. received and contents noted. I shall feel at liberty to lay it before the board of trustees at the next meeting, in July. If the board of trustees have been violating law, it is time it was stopped. Perhaps trustees might be selected who have prescience sufficient to foresee all contingencies that may occur in the future, and have power to secure corresponding legislation.

Very truly yours,

T. WHITING.

## EXHIBIT D.

DAVENPORT, IOWA, Oct. 24, 1879.

*Mr. Timothy Whiting, Mt. Pleasant, Iowa :*

MY DEAR SIR—The enclosed note should have been sent when I acknowledged the receipt of your last letter, but I wished to hear from Mr. Fellows of his decision ere sending it. He has, doubtless, written you ere this, and I do not think it wise to delay any longer, for fear the report will have been sent to the governor. This note, you will see, gives my indorsement to the report as a whole. Please paste it on the manuscript report where the other names are. If it be *possible* that the report has been sent, please send to the governor. Let me know if it reaches you in time, please.

In haste, but very truly yours,

M. A. CLEAVES.

DAVENPORT, IOWA, Nov. 25, 1879.

*Mr. T. Whiting, Mt. Pleasant, Iowa :*

DEAR SIR—Gov. Gear writes that during his absence from home the copy of the minority report became either misplaced or lost. He has sent to Mr. Fellows and myself for a copy, but neither of us kept one. Will you please send him at once the copy I sent you, and oblige,

Yours, very truly,

M. A. CLEAVES.

P. S. I have just written Gov. Gear and told him that you had a copy, and that I had written you requesting you to forward the same to him.

M. A. C.

## EXHIBIT E.

LANSING, IOWA, Sept. 15, 1879.

*Timothy Whiting, Mt. Pleasant, Iowa :*

MY DEAR SIR—I had intended ere this to write you in reference to the report to be made to the governor, but in looking up the matter find it difficult, in the absence of all memoranda and statistics, to put anything in proper shape to incorporate in the report. As it is almost certain I shall be unable to attend the next meeting of the board, I will indicate briefly my views upon those matters the governor called our attention to, although I entertain serious doubts whether it will be best to say anything on the subject. What is usually denominated the "support fund," is the fund provided by section 1390 of Code, as amended by chapter 100, acts seventeenth general assembly, "for the purpose of defraying any deficiencies that may arise in the current expenses of the hospital." It is also provided that no part of this fund shall be used in making improvements. It is often difficult to determine just where to draw the line between what is properly considered "current expenses," and "improvements." To illustrate: the heating of the hospital building is a very important and expensive item of current expense. Now, we suppose it will not be questioned that whatever is neces-

sary to be done to heat the building, and keep it comfortable, and to do it safely and economically should be done. If any part of the heating apparatus, including boilers, from long use become defective, or fail to perform proper service, it is the duty of the board to repair, or replace, or even add to such apparatus, so far as may be necessary to accomplish the required object. The comfort, health and safety of the inmates demand this. During a biennial period about — tons of coal is required to be hauled from the depot to the hospital. Great trouble and expense has been saved in hauling coal by making repairs upon the road leading to the side-track on the railroad, put in for the use of the hospital. Whatever has been done in that direction has been with a view to economy, and we have no hesitation in saying that but little more time than the biennial period is required to make a saving greater than the expenditures. Indeed, there have been times when it has been practically impossible to do any hauling over the roads, without making improvements and repairs thereon. Now, it is true that such expenditures, while properly classed as current expenses and are absolutely necessary, are in fact permanent improvements; a permanent benefit. To us it does not seem an objection that the State reaps a permanent benefit from expenditures necessarily made for the safe and economical working of the hospital. The supply of water depends upon keeping the reservoirs in proper repair and condition. This, during the last two years, has required the removal of, perhaps, six to seven thousand yards of earth that had accumulated, at an expense of \$1,500. Now, the board had a choice of two things, either do that work or leave the hospital without a proper supply of pure water. The line of duty seemed to us plain, and the work was performed. It has been the earnest desire of the board to attain the greatest success in the management of the hospital, to do it as economically as possible, and without any violation of the spirit of the laws under which it acts.

The above gives a general idea of my views. Of course it needs to be put in shape, and made more full and definite. The difficulty is in calling attention to this matter in this way without noting the fact that the governor has criticized the action of the board. Possibly you may have received from the governor some intimation that will aid the board in determining what is best. I shall be pleased to hear from you before the board meets, and I may possibly write something more and send you, in case I cannot attend the meeting.

Very truly,

L. E. FELLOWS.

## EXHIBIT F.

*Current Expense Fund—Exhibit of Steward for Year ending September 30, 1877.*

## RECEIPTS.

From balance on hand, Nov. 1, 1876 .....	\$ 1,163.03
From auditor of state.....	\$120,000.00
From articles sold .....	2,217.27
From interest on warrants .....	1,534.99
From private patients.....	845.50
*From transferred from building .....	1,567.70—126,165.46
	<hr/>
	\$127,328.49

## EXPENDITURES.

For meats and fish ....	9,969.10
For breadstuffs .....	6,310.78
For fruit and vegetables .....	1,707.86
For coffee and tea.....	2,244.46
For sugar and syrup .....	4,149.92
For groceries .....	1,898.46
For butter .....	5,334.47
For cheese and eggs.....	1,354.35
For mortuary expenses .....	123.40
For medicinal supplies.....	3,512.02
For postage and stationery.....	767.85
For dry goods and clothing.....	5,125.98
For library and diversions .....	715.62
For furniture and furnishing .....	4,246.44
For repairs .....	7,540.18
For hardware and queensware .....	2,285.91
For interest.....	3,277.17
For contingencies.....	3,332.20
For visiting committee.....	451.10
For painters' supplies .....	544.61
For farm .....	3,651.11
For feed .....	3,343.55
For fuel.....	7,783.43
For lights .....	3,244.00
For salaries and wages.....	35,080.36—117,994.33
Transferred to new building .....	7,458.96
	<hr/>
	125,453.29
Balance on hand, Sept. 30, 1877.....	1,875.20
	<hr/>
	\$127,328.49

\*NOTE.—This amount was originally paid out of the current expense fund, but by order of the board of trustees was subsequently transferred to the building account.

*Exhibit of New Building.*

## RECEIPTS.

Enlarging washing and ironing room .....	\$2,000.00	
Replacing partition walls, and contingencies .....	3,000.00	
Providential fund.....	5,000.00	
Old iron sold.....	673.43	\$10,673.43
Transferred from current expense fund .....		21,373.00
Total.....		\$32,046.43

## EXPENDITURES.

For labor.....	\$12,189.88	
For iron contract and iron .....	5,999.17	
For roof contract .....	1,360.00	
For cut stone and building stone.....	3,008.69	
For replacing machinery, destroyed (in part).....	1,696.10	
For hauling stone from quarry.....	705.14	
For lime.....	588.50	
For sand .....	375.20	
For cement. ....	716.24	
For brick.....	2,523.00	
For lumber.....	602.47	
For shafting and pulleys.....	326.77	
For repairing engine and pumps.....	728.50	
For repairing tools.....	112.89	
For chimney tops.....	199.17	
For compensation, M. L. Edwards .....	160.98	
For freight .....	753.73	\$32,046.43

## EXHIBIT G.

*Comparative Statement.*

AT MT. PLEASANT.	AT INDEPENDENCE.
1877-78.	1877-78.
Current expenses.....\$120,030.19	Current expenses.....\$63,330.27
Daily average patients, 595.59.	Daily average patients, 353.
Cost per capita per annum ....\$201.53	Cost per capita per annum ....\$179.40
Cost per capita per month..... 16.79	Cost per capita per month..... 14.95
Cost per capita per week..... 3.87	Cost per capita per week..... 3.45
1878-79.	1878-79.
Current expenses.....\$91,217.85	Current expenses.....\$66,556.63
Daily average patients, 455.51.	Daily average patients, 422.
Cost per capita per annum ....\$200.25	Cost per capita per annum ....\$157.71
Cost per capita per month..... 16.68	Cost per capita per month..... 13.14
Cost per capita per week..... 3.85	Cost per capita per week..... 3.03

*Excluding Repairs and Interest at Mt. Pleasant and Repairs at Independence.*

COST AT MT. PLEASANT.	COST AT INDEPENDENCE.
1877-78.	1877-78.
Per capita per month .....\$15.38	Per capita per month .....\$14.67
Per capita per week..... 3.55	Per capita per week..... 3.38
1878-79.	1878-79.
Per capita per month ..... 14.84	Per capita per month ..... 12.31
Per capita per week..... 3.42	Per capita per week..... 2.84

Annual Total Current Expense.

Excess at Mt. Pleasant—First year per month.....	\$1.84
First year per week .....	.42
Second year per month .....	3.54
Second year per week.....	.82

Repairs, etc., excluded.

Excess at Mt. Pleasant—First year per month .....	\$ .71
First year per week .....	.17
Second year per month .....	2.53
Second year per week.....	.58

MT. PLEASANT.		Excess of cost at Mt. Pleasant.
1877-78.		
Total current expenses .....	\$120,030.19	
Daily average of patients, 595.59.		
Cost per capita per month.....	16.79	\$1.84
Cost per capita per week .....	3.87	.42
1878-79.		
Total current expenses .....	91,217.85	
Daily average of patients, 455.51.		
Cost per capita per month .....	16.68	3.54
Cost per capita per week.....	3.85	.82
INDEPENDENCE.		
1877-78.		
Total current expenses .....	\$63,330.27	
Daily average of patients, 353.		
Cost per capita per month .....	14.95	
Cost per capita per week .....	3.45	
1878-79.		
Total current expenses .....	66,556.63	
Daily average of patients, 422.		
Cost per capita per month .....	13.14	
Cost per capita per week .....	3.03	

Excluding Repairs and Interest at Mt. Pleasant and Repairs at Independence.

COST AT MT. PLEASANT.		COST AT INDEPENDENCE.		Excess at Mt. Pleasant.
1877-78.		1877-78.		
Per capita per month....	\$15.38	Per capita per month....	\$14.67	\$ .71
Per capita per week .....	3.55	Per capita per week .....	3.38	.17
1878-79.		1878-79.		
Per capita per month....	14.84	Per capita per month....	12.31	2.53
Per capita per week .....	3.42	Per capita per week .....	2.84	.58



EXHIBIT H.

*Supplies and Stock, Iowa Hospital for the Insane, Mt. Pleasant, Feb. 5, 1880.*

Two teams, driving horses.....	\$ 500.00	
Two double and two single harnesses.....	65.00	
Saddles and bridles.....	15.00	
One top and one open buggy... ..	100.00	
One carriage.....	150.00	
Express wagon.....	150.00	
Three-seated spring wagon.....	50.00	\$ 1,030.00

FARM.

Three teams—mules.....	580.00	
Two teams of horses.....	325.00	
One mule.....	50.00	
Five sets farm harness.....	100.00	
Six farm wagons.....	250.00	
One butcher wagon.....	20.00	
Two bob-sleds.....	35.00	
One sleigh.....	10.00	
Combined reaper and mower.....	150.00	
One mower.....	75.00	
Hay rake.....	5.00	
Cradles and scythes.....	10.00	
Four harrows.....	30.00	
Two corn cultivators.....	35.00	
Five stirring plows... ..	50.00	
Sod plow.....	20.00	
Four small diamond plows.....	28.00	
Four shovel plows .....	20.00	
One roller.....	25.00	
Fan mill.....	15.00	
Grain drill.....	25.00	
Garden roller.....	10.00	
Lawn mower.....	15.00	
Shovels, pitchforks, etc.....	100.00	
Two platform scales.....	125.00	
One hundred tons of hay, at \$6.00.....	600.00	
Seven hundred bushels of oats, at 25c.....	175.00	
Three hundred bushels of corn, at 28c.....	84.00	
Forty cows, at \$30.....	1,200.00	
One bull.....	50.00	
One hundred and twenty shoats.....	525.00	\$ 4,742.00

FAT CATTLE.

Seven steers.....	470.00	
Eleven sheep.....	35.00	\$ 505.00

ICE.

Two hundred tons.....	150.00	\$ 150.00
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FUEL.

Two hundred cords of wood.....	975.00	
One hundred and fifty tons of coal.....	487.50	\$ 1,462.50

LUMBER.

Hard and soft.....	820.00	\$ 820.00
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## PROVISIONS.

Salt meat and lard.....	945.03
Five thousand pounds flour, at \$3.00 per hundred.....	150.00
One thousand bushels of potatoes, at 50c.....	500.00
Five bags of coffee.....	112.54
Four and a-half chests of tea.....	50.00
Five barrels vinegar.....	30.00
Seven barrels dried fruit.....	117.32
Two thousand pounds butter at 10c.....	200.00
Eight hundred and fifty dozen eggs, at 10c.....	85.00
Sorghum.....	105.60
Five barrels beans.....	38.85
Sugar.....	174.90
Salt.....	11.25
Soaps, hard and soft.....	143.80—\$ 2,664.29

## MEDICAL SUPPLIES.

Drugs, liquors, etc.....	600.00—\$ 600.00
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## DRY GOODS.

Dry goods, blankets, clothing, etc., etc.....	3,000.00—\$ 3,000.00
Total.....	\$14,973.79—\$14,973.79

## EXHIBIT K.

*Statement of Interest paid by Mt. Pleasant Hospital, Term ending Sept. 30, '79*

To J. W. Henderson, July, 1879, voucher No. 4.....	\$ 70.44
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## RECAPITULATION.

To Mark Ranney, superintendent.....	\$1,798.04
To H. M. Bassett, assistant.....	881.55
To Meno Trope.....	97.56
To M. L. Edwards, treasurer of hospital.....	680.42
To T. V. Taft.....	29.04
To Mary Ann Blower.....	26.27
To Maggie Calhoun.....	2.52
To Kate McGrath.....	18.45
To Hans Erickson.....	101.01
To D. J. Nicholson.....	7.60
To Peter Lingren.....	3.80
To Thomas Henderson.....	29.39
To Mary Coddington.....	57.75
To C. H. King.....	3.80
To Anna Monson.....	25.11
To A. R. Wickersham.....	21.10
To Edwin Van Cise.....	11.20
To Lewis Hisel.....	37.17
To Lizzie Snyder..	2.00
To Sophia Plumer.....	11.62
To A. H. Bereman.....	42.53
To A. Roper.....	40.00
To August Hall.....	24.60
To John Hall .....	19.02
To M. F. Riorden.....	15.46
To John H. Whiting....	27.50
To J. W. Williams.....	12.70
To J. W. Henderson.....	70.44
Total.....	\$4,098.25

EXHIBIT L.  
BY-LAWS.

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CHAPTER I.—ORGANIZATION AND MEETINGS OF THE BOARD OF TRUSTEES.

SECTION 1. The board of trustees shall, at their annual meeting on the first Wednesday in December, elect one of their number president, and another secretary, and shall also elect some person treasurer, who shall hold their offices until their successors are elected. All elections shall be by ballot, unless otherwise ordered.

SEC. 2 There shall be in each year four regular meetings of the board, to be holden at the hospital, on the first Wednesdays in December, March, June and September.

SEC. 3. Upon the written application of two trustees, the secretary shall forthwith call a special meeeing, and state as nearly as practicable the business for which such meeting is called in the notice to the trustees.

CHAPTER II.—DUTIES OF OFFICERS.

SECTION 1. The president of the board of trustees shall preside at all meetings of the board, and perform all such executive duties as the trustees may from time to time direct: *provided, however*, that the board may elect a president *pro tem.*, who shall hold his office during the term of the president, preside in the absence of the president, and have the same power and authority in the absence of the president as he would have if present.

SEC. 2. The secretary shall keep a full and true record of all proceedings of the board, and sign all contracts made by them, and notify each trustee of the time and place of all special meetings of the board.

SEC. 3. The treasurer shall hold his office for the term of one year, and until his successor is elected and qualified, unless sooner removed. His compensation shall be one-fourth of one per cent on all moncys received by him, and one-fourth of one per cent on all moneys paid out by him as such treasurer. He shall execute a bond as provided in section 1390 of the Code of Iowa. All moneys due the hospital shall be paid to the treasurer, and for all sums paid to him, excepting the sums drawn from the state treasurer, he shall give his receipt, which receipt shall be filed in the office of the steward. The treasurer shall keep an accurate account of all moneys received by him, and from what source, and of all sums by him paid out, and from what fund, and shall make no payment excepting on the order of the steward. At each quarterly meeting of the board he shall present to the board an abstract of his accounts, showing his receipts and payments for the last quarter, and any balances in his hands, and shall, at the same time, exhibit to the board, or its committee, his vouchers and book of accounts.

CHAPTER III.—COMMITTEES.

SECTION 1. There shall be a standing committee on finance, consisting of two trustees, to be appointed by the president at each annual meeting of the board, or if otherwise directed, to be elected by ballot. At each quarterly or

special meeting any vacancy in the committee shall be filled by *pro tem.* appointments by the president. It shall be the duty of the finance committee to examine all accounts and reports touching the receipt and expenditure of money; and examine into and report, at least quarterly, upon all other matters appropriate to such committee.

SEC. 2. There shall be a thorough visitation of the hospital, at least once a month, by one or more of the trustees—a quarterly visitation by the board of trustees at their regular meetings. Visitations may be made as much oftener, and by such number of the trustees, as the board shall by vote determine. A record shall be made of each visit in a book kept for that purpose.

#### CHAPTER IV.—FINANCE.

SECTION 1. The money appropriated by the legislature for the purpose of defraying the deficiencies that may arise in the current expenses of the institution shall be drawn from the state treasury as follows: At each regular meeting, and at such other times as there may be a necessity for the same, the steward shall, after accounting for the disbursements already made, present an estimate, as much in detail as practicable, of the amount needed for expenditure before the next regular meeting of the board of trustees. The board shall then make an order for the drawing of such sum, or so much thereof as they may deem necessary; which order shall be entered upon the records of the board, and the sum ordered may then be drawn from time to time from the state treasury, by the treasurer, as provided for in the law for the government of the institution.

SEC. 2. All money appropriated by the legislature, and placed under the control of the trustees, for building, finishing, furnishing, or for any purpose other than the current expenses of the hospital, shall be drawn by an order of the board of trustees, signed by the secretary, at some regular or special meeting of said board, directing the payment of the sum of money specified to the treasurer or his order.

SEC. 3. The steward shall collect all sums due the hospital from individuals for board or clothing furnished patients, or due from other sources; and at each regular meeting of the board he shall make report of the sums so received.

SEC. 4. At each regular meeting of the board of trustees, all disputed and discredited bills or accounts shall be referred to the finance committee, who shall report in writing upon the same as soon as practicable.

SEC. 5. All contracts for supplies for the hospital, and all purchases for the same, shall be made by the steward.

SEC. 6. All business transactions of the hospital, where money is to be disbursed, shall be in writing, either by written contract, bill receipted, or pass-book, properly minuted at the time of the purchase.

SEC. 7. No account, that shall exceed the sum of one dollar, shall be paid unless accompanied by a bill of particulars, giving dates, items and amounts. All accounts current against the institution shall be called in monthly, and shall be carefully compared with the written contract or pass-book, and if

material errors are discovered in any bill, it shall be returned to the holder for correction.

SEC. 8. Before making up the biennial report of the institution, the steward shall cause each bill paid during the two years previous to be entered in its proper order of date in the financial record. Such entry shall be made to exhibit the name of the person to whom such payment is made, its date and total amount; and the several items in such account shall be placed under appropriate heads, so as to show in the summary of expenditures the amounts disbursed for each class of supplies, as minutely as may be required for a clear understanding of the expenditures of the institution.

#### CHAPTER V.—RESIDENT OFFICERS OF THE HOSPITAL.

SECTION 1. The resident officers of the hospital, excepting the superintendent, shall be chosen by the board of trustees at the annual meeting of the same on the first Wednesday in December; and shall hold their respective offices for the term of one year, and until their successors are chosen, subject to removal at the pleasure of the board. They shall devote themselves entirely to the interests of the hospital.

SEC. 2. None of the resident officers shall resign their office without first giving three months notice in writing of such intent, to the secretary of the board of trustees.

SEC. 3. The salaries of the resident officers shall be paid quarterly.

#### CHAPTER VI.—SUPERINTENDENT.

SECTION 1. The superintendent, as the chief executive officer of the hospital, shall have the general oversight of its affairs and management, subject to the laws and by-laws instituted for its government. As such, he shall give such direction to the other resident officers as will enable them, in their several positions, to render the most efficient service. He shall prescribe their several duties and see to their faithful performance. Subject to the direction of the trustees, he shall institute such police regulations as the good order of the hospital may require, and shall be responsible to them for the care of all the buildings, grounds, stock, furniture, fixtures, and other property belonging or appertaining thereto. He shall have the entire supervision of the patients in their medical, moral and physical treatment. He shall visit them in their wards as frequently as may be necessary to keep himself fully advised of their condition, and to note the progress of each case; and he shall give such directions to the overseers and attendants as may be essential to meet the ends of their treatment.

SEC. 3. At each annual meeting of the board of trustees, he shall make a full report of the condition of the hospital, and its transactions for the past year, with such observations, reflections and suggestions as he may deem important for the interest of the institution, or of interest to the public generally, or the medical profession. And at each regular meeting he shall give such information to the board as he may deem of importance.

SEC. 3. For good cause he may suspend any resident officer, but shall

immediately give notice thereof to the board of trustees. He may, at pleasure, discharge any of the employes, attendants or assistants.

SEC. 4. He shall provide a seal for the hospital, with the proper device thereon, which shall be under his control, and used by him whenever the seal of the hospital is required.

SEC. 5. The superintendent shall, from time to time, make such timely requisitions for supplies for the support of the hospital, and to carry on its ordinary operations, as may be necessary, specifying in detail the particular articles needed, and, when necessary, the quantity and quality of each; and he shall furnish the steward with such requisitions; and, as occasion may require, he shall make like requisitions for any articles needed to make or carry on any improvements authorized by the board. So far as may be, these requisitions—and especially such as involve large expenditures—shall be made at such time that the board may have knowledge of them at their regular meetings.

SEC. 6. He shall constantly observe the conduct of persons employed in subordinate stations, and see that in all respects they do their duty.

#### CHAPTER VII.—ASSISTANT PHYSICIANS.

SECTION 1. The assistant physicians shall prepare and superintend the administering of medicines. They shall visit the wards frequently, and carefully note the condition and progress of individual patients. They shall see that the directions of the superintendent are faithfully executed, and shall promptly report any cases of neglect or abuse that may come under their cognizance. They shall assist in devising employment and recreation for the patients, and endeavor in every way to promote their comfort and recovery. They shall keep such record of the cases as the superintendent may direct, and assist him in preparing statistics, conducting correspondence and such other duties of his office as can be properly deputed.

SEC. 2. In the absence of the superintendent, the assistant physician who is senior by appointment shall exercise the duties of his office, unless the trustees otherwise determine.

#### CHAPTER VIII.—STEWARD.

SECTION 1. The steward shall have the immediate supervision of the farm and all farming operations, and shall conduct and carry on the same to the best of his knowledge and skill, in order to realize the largest products attainable with good economy of expenditure.

SEC. 2. He shall have the oversight of the farm buildings and fences, and see that they are kept in proper condition; also, of all farming tools, implements and vehicles; and of all wagons, and carriages kept for the use of the resident officers, and to carry on the operations of the hospital; and he shall see that these are all kept in good order and condition for use when needed, and protected from the weather when not in use.

SEC. 3. He shall have the oversight and care of all teams and carriage horses and their proper tackle, and see that they are well treated and cared for, and ready for use when needed.



**SEC. 4.** He shall have the care and management of all other live stock and animals upon the premises, and see that they are well sheltered and fed and watered, and in all respects properly treated.

**SEC. 5.** He shall see that the necessary butchering of animals is done, and that the supplies of fresh meats, of the best quality, and of the kinds and in the quantities required by the superintendent, are furnished, as they may be needed.

**SEC. 6.** In farming the grounds, he shall reserve for garden purposes such parcels as may be designated by the superintendent. He shall not interfere with any drive-ways or walks already made or in progress, nor any grounds set apart for the purpose, excepting as the superintendent may direct, or permit. And if the superintendent shall desire to have any of the grounds reserved for ornamental purposes cultivated, he shall see that it is done as the superintendent may direct.

**SEC. 7.** Whenever the superintendent shall desire to have any of the patients perform such farm labor as they may be capable of doing, on notice to that effect the steward shall afford every facility he can for the purpose; and such labor shall be performed under the immediate care of the attendants in charge of such patients.

**SEC. 8.** The steward shall set apart, so far as necessary, the most suitable team and carriage horses and vehicles for the use of the superintendent and the other resident officers, and for giving rides to the patients, as they may be needed and called for; and he shall see that such team work as may be needed in carrying on the ordinary operations of the hospital is done at the proper times, and so as to interfere as little as may be with the farming operations; and he shall also, so far as he can, furnish such team work as may be needed in making any improvements authorized by the board.

**SEC. 9.** The steward shall provide and keep in his office a suitable book, which shall at all times be accessible to the superintendent, in which the latter shall enter, from time to time, all requisitions he may deem necessary to make of articles of supplies for the hospital use; and also all articles of every description necessary to be used in making repairs, and in making any improvements authorized by the board; and in making his purchases the steward shall take notice of these entries and be guided by them. In case of supplies needed in the department of the matron, with the consent or approval of the superintendent, the entries may be made by her.

**SEC. 10.** Whenever directed by the board, or by a committee of the same, he shall advertise for bids for supplies, or articles needed; and in such cases he shall conclude no contract without the approval of the board, or of such committee. Unless the board otherwise direct, the committee for such purpose shall be the regular visiting committee. It shall also be the duty of the steward in making other large purchases to consult such committee.

**SEC. 11.** He shall provide the necessary account books for his department, which shall always remain in the hospital, and shall be at all times open to the inspection of the trustees and superintendent, and any one of the state officers or members of the general assembly.

SEC. 12. He shall keep clear, methodical accounts of all purchases, and of all sales of the produce of the farm, and of any other articles sold, and of all receipts and expenditures of money. He shall, when required, submit his account books and his recent vouchers to the board or its finance committee; and he shall furnish quarterly abstracts of the same to the board at its regular quarterly meetings.

SEC. 13. He shall keep accounts with the resident officers and pay their salaries quarterly; and he shall keep accounts with all the employes of the hospital of every class, and settle with and pay them monthly.

SEC. 14. He shall open an account current with the farm, charging it with all expenditures on its account and crediting it with all products, whether used or sold; and at the close of each year he shall furnish the board with an abstract of such account.

SEC. 15. He shall constantly observe the conduct of persons employed in subordinate positions, see that in all respects they do their duty; and report immediately to the superintendent any instance of negligence, misconduct, or abuse that he may observe, or that may come to his knowledge. He shall assist the superintendent in maintaining the police of the establishment; and in such other ways as he may direct, in promotion of the general interests of the hospital.

SEC. 16. He shall execute a bond, with sufficient sureties, to be approved by the board of trustees, in the penal sum of ten thousand dollars, conditioned that he will faithfully discharge the duties of his office, and pay over and account for, to the proper officer or officers, all moneys that may come into his hands belonging to the hospital; which bond shall be filed with the superintendent for safe keeping.

SEC. 17. It shall be the duty of the steward to furnish the board, biennially, a complete inventory of all the property belonging to the hospital and farm; this inventory to be made at the annual meeting preceding the regular meeting of the legislature.



FOURTH BIENNIAL REPORT

OF THE

TRUSTEES, SUPERINTENDENT, STEWARD AND TREASURER

OF THE

IOWA HOSPITAL FOR THE INSANE,

AT

INDEPENDENCE,

FOR THE FISCAL YEARS OF 1878 AND 1879.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1879.



*To HIS EXCELLENCY, JOHN H. GEAR, Governor of Iowa:*

*Sir—We transmit, herewith, the Fourth Biennial Report of the Trustees of the Iowa Hospital for the Insane, at Independence.*

ERASTUS G. MORGAN,  
LEWIS H. SMITH,  
DAVID HAMMER,  
S. E. ROBINSON,  
JOHN G. HOUSE,

*Trustees.*

*Independence, Iowa, October 2, 1879.*



## OFFICERS OF THE HOSPITAL.

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### BOARD OF TRUSTEES.

ERASTUS G. MORGAN, *President*.....FORT DODGE.  
JOHN G. HOUSE, *Secretary*.....INDEPENDENCE.  
STEPHEN E. ROBINSON.....WEST UNION.  
DAVID HAMMER.....MCGREGOR.  
LEWIS H. SMITH.....ALGONA.

### TREASURER.

WILLIAM G. DONNAN.....INDEPENDENCE.

### RESIDENT OFFICERS.

ALBERT REYNOLDS, M. D.....SUPERINTENDENT.  
GERSHOM H. HILL, M. D.....FIRST ASSISTANT.  
HENRY G. BRAINERD, M. D.....SECOND ASSISTANT.  
NOYES APPELMAN.....STEWARD.  
Mrs. LUCY M. GRAY.....MATRON.



# REPORT.

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THE Trustees herewith transmit to the Governor their biennial report, together with those of the Superintendent, Treasurer, and Steward.

By the blessing of Providence the institution has been preserved from all the destructive elements and sweeping epidemics, and still continues its prosperous career, with what we believe to be a competent and efficient corps of resident officers.

There were, at the date of the last report, 322 patients remaining in the Hospital. There have since been admitted, from all sources, 539; discharged, 411; died, 72. Remaining, September 30, 1879: males, 227; females, 223; total, 450.

Four new wards have been completed in the south wing capable of accommodating seventy-five patients, so that our facilities for the care of this unfortunate class of humanity have about kept pace with the increase of admissions. For an account of the movement of the population of the Hospital, we respectfully refer you to the report of the Superintendent.

Two more sections of the south wing are now being inclosed, and are awaiting an appropriation by the legislature for their completion. There remain two more sections to be built, in order to complete the whole building, with the exception of the portico.

The amount of moneys received from all sources within the biennial period for defraying expenses, as shown by the Steward's report, is:

Balance on hand October 1, 1877.....	\$ 3,001.09
Drawn from the State Treasury.....	119,164.01
Received from all other sources.....	3,871.31
Requisition in hands of the Treasurer on the Auditor of State to meet the deficiency for the quarter ending Sept. 30, 1879.....	13,060.00
Total.....	\$ 139,096.41

The amount of the current expenses of the institution for the period is.....	\$129,771.55
<hr/>	
Leaving a balance in the hands of the Treasurer, after paying all vouchers to date, of.....	\$ 9,324.86

For a full exhibit of expenses, we refer you to the report of the Steward for statement of moneys paid out, and for what they were paid; also, to the Treasurer's abstract, both of which are hereto annexed.

Dr. Albert Reynolds's first term of office as Superintendent expired on the first day of February, 1878. The position he had filled to the entire satisfaction of all. He was, the refore, atthe preceding annual meeting, unanimously re-elected.

Soon after the date of our last report, it became necessary to add to our medical staff a second assistant physician. The Board elected Henry G. Brainerd, M. D., who has performed the duties of the position with marked ability, and added much to the efficient care of the patients. Mr. Noyes Appelman was elected Steward in place of Mr. G. B. Smeallie, whose term of office expired at the end of the last biennial period. Mr. Appelman is doing good service in the responsible position he occupies.

On the recommendation of the Superintendent and engineer, the draught of the furnaces was, last year, changed from a downward direction into the smoke-stack to a more direct and horizontal one. and each furnace has an independent flue for conducting its smoke into the main chimney. These changes have much improved the draught and effected a great saving of fuel. The expense of the work was \$417.98, and paid out of the contingent fund.

In our last report we recommended an appropriation for constructing a reservoir for surplus water to be kept for use in the event of a drouth or a fire. The necessity is now much greater, and we respectfully renew the recommendation. During the present season our supply of water has been so much abridged that it seemed an absolute necessity that some means for increasing the quantity should be devised. Accordingly, after much deliberation, the Trustees decided to sink a well ten feet in diameter, and at least fifty feet in depth. After sinking the brick wall, which was one foot in thickness, through clay and quicksand, thirty feet, it was found that, if an attempt should be made to sink it lower, this wall or curbing would be inadequate to withstand the pressure of the quicksand; we, therefore, abandoned the



project of sinking the wall lower, and decided to bore in the bottom of the well. This we have done, and bored ninety-five feet through clay and fifteen feet into lime rock, without finding much water. This has exhausted the contingent fund, and we have no means at hand for the further prosecution of this work.

This institution now requires fifteen hundred barrels of water per day for the health and comfort of the patients, and the amount needed increases each year; and the proper means of furnishing the same is most earnestly urged upon the legislature.

Three of the boilers, having been in use six years, had become defective and dangerous for further use. These have been thoroughly repaired, at an expense of about \$1,200, which has been paid for out of the current expense fund, the contingent fund having already been exhausted.

It is thought they will be effective and safe for one or two years longer, when they must be replaced by new ones. As this work must be done in the summer, before another session of the legislature, we would ask an appropriation for this purpose.

The Seventeenth General Assembly appropriated five hundred dollars for the purpose of grading a road on the south side of the Hospital farm to the B., C. R. & N. R. R. On account of the impracticability of building the road and connecting with the railroad at that place, this sum is not expended. We respectfully ask that this sum may be expended on the road east of the Hospital leading out to the main road to Independence, where it is greatly needed for grading and bridging.

The Seventeenth General Assembly reduced the price for care and board of patients from a maximum of twenty to sixteen dollars per month. The Trustees, at the quarterly meeting, June 6, 1878, finding this amount more than sufficient, reduced the price to twelve dollars. At the annual meeting, October 4, 1878, on account of the necessary increase of expenses for the winter months, it was restored to sixteen dollars. On April 3, 1879, it was fixed at twelve dollars, and finally at the meeting held July 3, 1879, it was reduced to ten dollars per month, where it now remains.

In our last report we called attention to the subject of insane convicts, and others, who in an insane paroxysm have committed murder and other high crimes. These have been sent here, from jails and other places of confinement, for custody and treatment. All such persons are extremely objectionable in the ordinary wards of a hospital,

usually profane and vulgar, if not demented, corrupting the morals of others, and are constantly annoying the officers and attendants by attempts, often successful, to escape. We think it would be humane, as well as economical, to provide at once a separate ward for such persons, attached to the Additional Penitentiary, at Anamosa. For further remarks on this subject, we refer you to the report of the Superintendent.

We would further state that we believe it to be good policy to build the two remaining sections of the south wing without delay, in order to accommodate the increasing number of patients in the northern district of the state, who are accumulating and awaiting its completion for admission. We also recommend the completion and furnishing the new sections now being inclosed, without delay.

It now remains to summarize the wants of the institution:

1st. An appropriation for three new boilers, to replace the old, \$4,500.

2d. For constructing a reservoir, \$6,500.

3d. For the purpose of continuing the boring of an artesian well, already commenced, \$1,000.

4th. For extending the main sewer fifteen hundred feet, \$1,800.

5th. For plastering the ceilings of the basement and attics for greater safety against fires, \$1,000.

6th. For the purchase of a steam mangle and centrifugal wringer, now absolutely necessary for the laundry, we respectfully ask an appropriation of \$800.

## SUPERINTENDENT'S REPORT.

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*To the Honorable Board of Trustees of the Iowa Hospital for the Insane at Independence.*

GENTLEMEN—It is with feelings of pleasure, and gratitude, that I present the Fourth Biennial Report of this Hospital. Gratitude to Providence for the moderate amount of success that has attended our efforts, and pleasure when I recall the many acts of kindness, and words of commendation, from yourselves. I can conceive of no official position requiring more external support, and forbearance, than that of superintendent of a hospital for the insane; and I know of none more likely to be misunderstood or maligned. So much obscurity and mystery, in the public estimation, hang about the insane, that it is no wonder a hospital filled with them should be the subject of much comment by those who know a little of it, and afford the press a never ceasing theme for gossip, and suggestive investigations.

There were in Hospital, at the beginning of this biennial period, 165 men and 157 women, a total of 322. There are at this date 227 men and 223 women. The changes have been as follows: 539 have been admitted, 411 have been discharged, and 72 have died. Fifty-two of those admitted were transferred from Mt. Pleasant. Since the last biennial report, the counties of Clinton, Greene, Carroll, Crawford, and Monona have been added to the territory sending patients to this Hospital, the transfers from Mt. Pleasant being nearly all from those counties.

Of those discharged, 90 were recovered, 164 were improved, and 85 were unimproved. The most of the latter were transferred to almshouses, in order to make room for more needy, troublesome, or hopeful cases. The transfer of incurable patients to an almshouse is always unpleasant, but when the Hospital is full it becomes an imperative necessity. The question of providing suitable state buildings for the

chronic insane, in this state, cannot longer be put off, if we would do even bare justice to that unfortunate class. The idea, which has prevailed so extensively in this country for the last forty years, that the insane must be kept in large, strong buildings, is not an evidence of growing intelligence or humanity, but a relic of the old idea that the insane must be treated as malefactors and felons. There are probably fifteen hundred insane in the state. Twelve hundred of that number need the care of a public institution, need to be wards of the state. Eighty per cent can be as safely and comfortably cared for in buildings suitable for the average citizen. There is a good deal of foolish sentimentality written about surrounding the insane with the beautiful in nature and art. The comforts and necessities of life they should have in unstinted measure; but further than this, nine-tenths of them know little, and care less. Good food, comfortable, plain lodgings, clean, strong clothing, and kind attention make up the sum of their necessities, and generally fill their measure of happiness. It is no doubt gratifying to the feelings of friends to provide bountifully for their unfortunate kindred, but when the insane become state or county charges, it becomes a question of providing for all, with such liberality as may be for their best interests, with due regard to the rights of the taxpayer. The efficiency of the existing Hospitals for the insane, in this state, as curative institutions, would be greatly increased if a certain class of incurables could be removed, each year. A state Hospital suitable for the chronic insane, located with reference to convenience of transportation, water, and drainage, would seem to be imperatively demanded.

SUICIDES.—It is our misfortune to have to report among the cases of deaths, two suicides. For nearly six years from the opening of the Hospital, we were exempt from that accident. Of the 1,433 patients admitted, 169 had attempted suicide before admission, and in the case of 237 others the tendency was active, as manifested by threatening, and in some cases making elaborate preparations. It will be seen that 28 per cent of those under treatment were liable, under favoring circumstances, to destroy themselves. Add to this the many in whom the suicidal tendency is frequently temporarily active, but which is not a matter of record, and one may have some conception of the danger resulting from this tendency.

One of the cases was a patient suffering from phthisis pulmonalis, who had been insane six months before admission, November, 1878.

After being under observation two months, sleeping in an associate dormitory, her health gradually failing, she was allowed to occupy a single room, partly because her feeble condition made it desirable that she be allowed to lie down a part of each day; and partly because her cough seemed annoying to other patients. Nearly two months after she had first occupied a single room, she was found one morning suspended from the inside guard of the window by a loop made from her pillow-slip.

The next was a patient recently admitted, who had "meditated hanging," but made no demonstration; and the suicidal tendency did not seem active. On the contrary, she was fearful she would not get well. On the morning of her death, the attendant called her at the usual time, found she was awake, bade her good morning, gave her her clothing, and left her with the room door partially open. On returning, in about twenty minutes, to call her to breakfast, she found her lying at the foot of the bed, with her neck in a loop made with her stocking and handkerchief tied to the bedstead, her neck broken. In both cases, the coroner was called, and the jury gave the usual verdict. It is hard to see how any ordinary foresight could have prevented either of these accidents.

ELOPEMENTS.—Since the opening of this Hospital there have been twenty-three elopements or escapes, all by male patients. Frequent attempts are made by both sexes, but fortunately no female patient has succeeded. Of those who succeeded, two, both harmless and incurable, have never been heard from; eight, belonging to the same class, remained at home for more than a year, then, becoming worse, were sent back, and still remain here. One, an epileptic, succeeded in getting to Illinois, where he belonged. Three others had been discharged as harmless and incurable and were waiting removal by the county authorities. Four were so nearly recovered that they were allowed a good deal of liberty. Another went to his home, and though harmless was returned by the authorities, and was soon after discharged. One escaped in the night by breaking the iron guard of the window, but returned in the morning for his clothes.

The liability to escapes will be evident in view of the following facts: Ninety per cent of the patients go out of doors a part of each pleasant day. An average of forty are employed in various capacities, on the farm and garden, and in the carpenters' shop, wash-house, kitchen, and sewing-room. Two wards in the fourth and fifth stories

of the main building, containing sixty-four patients, send out a walking party of fifty to fifty-five each day. One ward of eighteen sends out a party of ten, beside four or five to work. In one ward the doors are thrown open during the day, in the summer months, and the patients allowed to go in and out as they please.

**EPILEPTICS.**—We have in Hospital, at this date, thirty-six epileptics—twenty-two male, and fourteen female. Two of the former are boys, eleven and twelve years of age. These patients are kept in two wards, one for each sex. This separation of the epileptics from other classes of the insane is made for several reasons. They are, as a rule, more quarrelsome than others, requiring special precautions to prevent altercation with other patients. Besides, it is extremely unpleasant to others, particularly convalescents, to witness the convulsions which are liable to occur at any time. The time will come, ere long, when the number of epileptics in the state will be so large as to warrant the building of a hospital for that class alone. As a rule, when epileptics come to a hospital, it is to stay permanently. Rarely does an insane epileptic fully recover. Though their intervals of apparent sanity are frequent, and sometimes of several weeks' duration, it is seldom that we feel justified in sending them home unless the friends are fully aware of the tendency to relapse, and are willing to take the risk. This fact we have frequently observed when an epileptic has been kept in a family till it is found imperatively necessary to remove him to a hospital: his friends are ever after unwilling to receive him at home, even though his condition be entirely changed, so much do they appreciate the responsibility and danger which his presence produces. The regular life they lead at the Hospital, together with the medical and moral treatment they receive, keeps them in a fair state of general health, and reduces the number of epileptic seizures to the minimum.

**DEPARTMENT FOR INSANE CRIMINALS.**—The great need of a hospital for insane criminals was set forth in your last biennial report. I think it should be built in connection with the Additional Penitentiary at Anamosa, and now would seem to be the proper time for the work. I trust the matter will be fully examined by the next General Assembly, and that so important a department of our penal and charitable institutions will no longer be deferred.

At a meeting of the Association of Medical Superintendents of American Institutions for the Insane, at Baltimore, in 1873, Dr.

Pliny Earle presenting the following resolutions, which were unanimously adopted:

“WHEREAS, The President of the Board of Public Charities of Pennsylvania has requested that this Association should express its opinion in regard to the proper disposition of insane convicts; therefore,

“*Resolved*, 1. That neither the cells of penitentiaries and jails, nor the wards of ordinary hospitals for the insane, are proper places for the custody and treatment of this class of the insane.

“2. That, when the number of this class in any state (or in any two or more adjoining states, which will unite in the project) is sufficient to justify such a course, these cases should be placed in a hospital specially provided for the insane, and that, until this can be done, they should be treated in a hospital connected with some prison, and not in the wards or in separate buildings upon any part of the grounds of an ordinary hospital for the insane.”

REQUIREMENTS.—As the capacity of the hospital has been increased, the need of more water has become an imperative necessity. During the last spring months the supply became very low, and for many weeks we were practically without water more than half the time. While the ground is full of water, the quantity flowing into our wells is ample for our use. But a moderate drouth renders the supply inadequate to our needs. To meet this requirement, I would suggest the construction of a reservoir of sufficient capacity for a three months' supply. It could be filled when there was a surplus, as there is at some time during each year, and used when other supplies failed. I would also suggest the building of three large cisterns for storing the great amount of rain water falling on the roofs of the different buildings, much of which is now being wasted. When it is stated that from ten to fifteen hundred barrels of water are used daily, it will be seen that no ordinary well or wells will, in a dry season, furnish the required quantity. It is an undisputed fact that a hospital for the insane should be, at all times, supplied with an unlimited quantity of pure water.

BOILERS.—The boilers for heating the building need to be replaced with new. They have just been repaired at a large cost, and will probably not wear more than two winters. Consequently new ones will have to be provided before the meeting of another General Assembly.

COLD ROOM.—There is needed a butter, meat, and milk room.



Where so much meat is used daily, it is very important that a suitable place be provided for keeping it fresh. In warm days, the milk, in our present milk room, becomes unfit for use, with consequent loss. With a suitable storage for butter, we could save a large sum each year, by buying and packing at favorable times.

**STOCK BARN.**—There is much need of a new stock barn for the milch cows; the one in use for the last six years being a mere shed, much too small and inconvenient.

**PLASTERING BASEMENT.**—In my last report I suggested the necessity of a small appropriation for plastering the ceiling of the basement. In a building costing the state so much as this, it would seem culpable to leave it at this unguarded point. I consider it the part most exposed to fire. The pine joists, covered with wooden flooring as dry as it is possible for wood to become, makes a mass that needs only a spark to kindle into a conflagration, which might cost the state many thousands, and endanger many helpless lives.

**SEWER EXTENSION.**—I would again call your attention to the sewer, which was extended last year, and suggest its further extension fifteen hundred feet to a large pond or basin near the east end of the Hospital farm. The odor from it, during certain directions of the wind and conditions of the atmosphere, reaches the building, and is, I believe, injurious to the health of the inmates.

**CHAPEL SERVICES.**—The Sabbath afternoon chapel services have been continued throughout the two years. Rev. Thomas B. Kemp, Rev. W. B. Phelps, and Rev. J. G. Schaible have been on duty through the whole of the biennial period. Rev. J. Patterson conducted the service every fourth Sabbath till February last, since which time Rev. F. Robertson has officiated. It is needless to say that the work of these gentlemen has been warmly appreciated by our household. The attendance is entirely voluntary on the part of patients, but it has been uniformly good. It is often remarked, by the officiating clergyman, that he has never had a more orderly or attentive congregation.

**AMUSEMENTS.**—The usual amusements, such as concerts, readings, magic lantern exhibitions, etc., have been continued through the fall and winter seasons. The dance is the entertainment calling out the greatest number, and seeming to give the most satisfaction, even to



those who do not take an active part. The music is now entirely furnished by our household. Two of the male attendants play the violin, one calls the figures, a female attendant plays the organ, and latterly one of the patients plays the bass viol, an instrument he has made during his stay here. I believe no other entertainment, in a hospital for the insane, furnishes so much diversion to all, patients and employes, as the weekly dance.

CONTRIBUTIONS.—We are indebted to the "Public Library and Reading Room," of Independence, for a large supply of papers and magazines, and to several private individuals in Independence and vicinity for the same.

The publishers of the following named newspapers will please accept our thanks for copies of their papers during the whole or a part of the biennial period: "Buchanan County Bulletin," "The State Register," "The Chronicle" (Franklin county), "Germania," (Milwaukee), "Der National Demokrat" (Dubuque), "Fayette County Union," "Fayette County News," "Der Dutch Amerikaner" (Waterloo), "Webster County Gazette," "West Union Republican," "Monona County Gazette," "Der Nord Iowa Herald" (Elkader), "The Parkersburg Eclipse," "Ft. Dodge Times," "Wright County Monitor," "Clinton Age," "Clinton Herald."

Doctor M. A. Cleaves, of Davenport, has lately sent to our library Hutton's Biographies of Scott, Gibbon, and Johnson, three volumes.

Dr. Gershom H. Hill has continued to share with me the duties and responsibilities connected with our growing household. He has, in addition to his medical duties, taken the principal charge of the evening entertainments.

Dr. Henry G. Brainerd was appointed to the position of Second Assistant Physician in May, 1878, and has given full and entire satisfaction.

Mrs. L. M. Gray has for the last two years continued to fill the position of Matron, a place for which she is fully qualified, and to the duties of which she has given her undivided attention.

Noyes Appelman succeeded Geo. B. Smeallie, as Steward, in January, 1878. He has, I think, filled the position in a highly creditable manner.

A. D. Gurnsey was engaged as engineer June 1st, 1878. The many advantageous and economical changes he has made in the heat-

ing and ventilating apparatus give the best possible evidence of his fitness for, and interest in, the work.

Charles Hartwell, apothecary, Mary Sisson, female supervisor, and David Fiester, male supervisor, have performed their duties with honesty and discretion.

To the employes, in all departments, I feel greatly indebted for more than an ordinary care and steadiness in the work. Fewer changes, comparatively, have been made, than in previous years.

To Dr. Jno. G. House, Secretary of the Board of Trustees, I feel under great obligations for his continued counsel and assistance.

A. REYNOLDS, *Superintendent.*

## APPENDIX A.

## ORDINARY DIETARY.

## BREAKFAST.

Sunday—Coffee, beef-hash, bread, butter.  
Monday—Coffee, beef-steak, potatoes, bread, butter.  
Tuesday—Coffee, corned-beef-hash, bread, butter.  
Wednesday—Coffee, beef-steak, oat-meal mush, bread, butter.  
Thursday—Coffee, beef-hash, bread, butter.  
Friday—Coffee, mackerel or beef-steak, potatoes, bread, butter.  
Saturday—Coffee, warmed roast beef with gravy, bread, butter.

## DINNER.

Sunday—Baked beans, cold roast beef, gravy, potatoes, pickles, warm brown bread, pie.  
Monday—Corned-beef, potatoes, cabbage, beets, bread, pie or pudding.  
Tuesday—Roast beef, gravy, potatoes, onions, pickles, bread.  
Wednesday—Vegetable soup, baked potatoes, bread, pudding.  
Thursday—Roast beef, gravy, potatoes, onions, pickles, bread.  
Friday—Picked cod-fish cooked in milk, or white-fish with drawn butter, potatoes, hominy, bread, pie.  
Saturday—Pea soup, vegetables, pickles, bread, hasty pudding with syrup.

## SUPPER.

Sunday—Tea, bread, butter, sauce, cake.  
Monday—Tea, bread, butter, cheese.  
Tuesday—Tea, bread, butter, cold light biscuit, sauce.  
Wednesday—Tea, bread, butter, rice, sauce.  
Thursday—Tea, bread, butter, cake.  
Friday—Tea, bread, butter, cold light biscuit.  
Saturday—Tea, bread, butter, cake.

## EXPLANATION OF DIET TABLE.

**BREAD.**—Graham as well as white bread is always on the table, and crackers are kept on hand for those who prefer them; hot buckwheat cakes, or griddle-cakes, are furnished for breakfast twice a week in winter, and hot corn-cake throughout the rest of the year; milk toast is made for supper twice a week in summer.

**MEAT.**—Veal, mutton, lamb, ham and eggs add to the variety in summer; fresh fish, liver, pork, and sausage in winter.

**VEGETABLES.**—Cabbage, onions, and beets are often used for dinner, and an ample supply of potatoes furnished once or twice a day throughout the entire year; green peas, string beans, green sweet corn, squashes, turnips, carrots, parsnips, vegetable oysters, radishes, lettuce, horse-radish, and tomatoes are had in abundance in their season; large quantities of green corn and tomatoes are kept for winter use; cucumbers, green tomatoes, and onions are made up into pickles.

**CAKE.**—Cake includes cookies, ginger-snaps, soft gingerbread, doughnuts, etc.

**SAUCE.**—Dried apples, peaches, prunes, berries, green apples, pie-plant, boiled or baked custards, afford a variety of sauce for supper; in addition, syrup is kept on the table constantly.

**EXTRAS.**—On Thanksgiving Day, the whole household has turkey for dinner, and either turkey or chicken on two other days in the year. Fresh strawberries and raspberries are served to all the patients several times in summer, also melons in their season. Apples are distributed throughout the entire house on Sunday during the winter months.

**DELICACIES FOR THE SICK.**—Fresh oysters, beef tea, chicken broth, mutton broth, scalded milk, boiled milk and crackers, gruel, oat-meal gruel, milk punch, cracked wheat, oat-meal porridge, dry toast, milk toast, toast with dropped egg, boiled egg, blanc mange, corn starch, tapioca, honey, jelly, and canned fruit, are carefully given to invalids and all who are not able to partake of the regular diet.

APPENDIX B.

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No person should be brought to the Hospital without having been clearly informed of his destination. If he is too insane to appreciate it, no harm will be done, while, if some reason still remains, he will understand that at least his friends intend to deal honestly with him. Nor should he be told that his stay will be but a few hours or days, or that he can go home when he pleases. Such promises give a patient a distrust of the Hospital and those under whom he is placed.

Patients should be provided, before coming to the Hospital, with a change of good clothing, and at least one extra change of underwear. While the institution will exercise all possible care that the clothing of patients is repaired and duly kept, it cannot guarantee against those occasional losses which are particularly liable to occur in a hospital for the insane. No money, jewelry, or valuable articles of clothing should be brought to the Hospital with patients. Parties in charge of patients arriving by night trains should remain in the city till morning. It is extremely injurious to patients, already retired and asleep, to be disturbed by the arrival of another, perhaps noisy and turbulent, and in our present crowded condition, every bed occupied, it is a great inconvenience.

Before starting for the Hospital with a patient it should be known that all the formalities of the law have been complied with.

It is very desirable that the commissioners of insanity should notify the officers of the Hospital of the probable time of the arrival of patients, with some main facts in regard to the case.

Some person should accompany the patient, who is familiar with the history of the case; some member of the family if practicable.

STATISTICAL TABLES.

TABLE I.

*Movement of population.*

MOVEMENT.	FIRST YE'R.			SECOND YE'R.			Total for the bi-ennial period.	FROM THE BEGINNING.		
	Men.	Women.	Total.	Men.	Women.	Total.		Men.	Women.	Total.
No. remaining, Oct. 1st, 1877 and 1878.....	165	157	322	203	198	401	.....	.....	.....	.....
No. admitted.....	150	126	276	149	114	263	539	803	630	1433
No. discharged—recovered...	22	24	46	18	26	44	90	136	113	249
No. discharged—improved...	46	27	73	56	35	91	164	216	142	358
No. discharged—unimproved	22	16	38	35	12	47	85	128	68	196
No. died .....	22	18	40	16	16	32	72	96	84	180
Average daily number.....	.....	.....	353	.....	.....	422	387½	.....	.....	.....
No. remaining, Oct. 1st, 1878 and 1879.....	203	198	401	227	223	450	.....	.....	.....	.....

TABLE II.

*Duration of insanity before admission, with results.*

DURATION.	Recovered.	Improved.	Unimproved.	Died.	Remaining.
Less than three months .....	147	111	27	52	85
Three to six months.....	33	46	13	19	29
Six to twelve months .....	32	42	27	18	55
One to two years.....	25	55	29	21	59
Two to three years.....	3	25	21	14	45
Three to five years.....	2	34	23	23	58
Five to ten years .....	1	19	31	20	60
Over ten years.....	.....	12	9	7	33
Unknown .....	6	14	16	6	26
Total .....	249	358	196	180	450

TABLE III.  
*Number at each age when admitted.*

AGE.	Biennial period.	Total from the beginning.
Under fifteen years.....	3	8
Fifteen to twenty.....	52	118
Twenty to thirty.....	158	416
Thirty to forty.....	138	376
Forty to fifty.....	100	267
Fifty to sixty.....	60	154
Sixty to seventy.....	18	67
Seventy to eighty.....	10	27
Total.....	539	1438

TABLE IV.  
*Nativity of patients.*

NATIVITY.	Biennial period.	From the be- ginning.
Maine.....	5	17
New Hampshire.....	13	5
Vermont.....	14	34
Massachusetts.....	5	16
Rhode Island.....	....	3
Connecticut.....	....	12
New York.....	70	193
New Jersey.....	....	6
Pennsylvania.....	43	114
Maryland.....	2	8
Virginia.....	3	9
West Virginia.....	1	1
North Carolina.....	2	2
South Carolina.....	....	1
Louisiana.....	1	2
Texas.....	....	1
Tennessee.....	2	6
Kentucky.....	4	12
Missouri.....	3	6
Ohio.....	46	112
Indiana.....	13	35
Illinois.....	21	70

TABLE IV—CONTINUED.

NATIVITY.	Biennial period. From the be- ginning.	
Michigan .....	4	11
Wisconsin .....	15	34
Iowa .....	58	139
California .....	1	2
Canada .....	14	39
New Brunswick .....	2	3
Nova Scotia .....	2	3
England .....	16	46
Scotland .....	3	3
Ireland .....	54	151
Wales.....	4	7
Denmark .....	5	13
Norway .....	24	53
Sweden .....	13	26
France .....	1	6
Switzerland .....	7	13
Germany .....	67	197
Bohemia .....	3	3
Iceland .....	.....	1
Unknown .....	8	18
Total .....	539	1433

TABLE V.

*Residence of patients admitted and remaining.*

COUNTY.	Admitted during bien- nial period.			Admitted from the be- ginning.			REMAINING.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Allamakee .....	10	11	21	26	25	51	5	9	14
Benton .....	14	11	25	25	31	56	7	14	21
Black Hawk .....	8	12	20	27	39	66	5	8	13
Bremer .....	1	2	3	16	11	27	2	2	4
Boone .....	.....	2	2	4	6	10	2	4	6
Buchanan .....	9	8	17	32	34	66	8	7	15
Buena Vista .....	2	2	4	4	5	9	2	2	4
Butler .....	.....	2	2	14	9	23	3	4	7
Calhoun .....	.....	1	1	.....	1	1	.....	1	1
Carroll .....	5	.....	5	5	.....	5	2	.....	2
Cerro Gordo .....	6	4	10	9	5	14	2	2	4
Cherokee .....	1	3	4	1	4	5	1	4	5
Chickasaw .....	7	10	17	17	19	36	6	6	12
Clay .....	.....	1	1	3	2	5	1	.....	1
Clayton .....	17	6	23	55	37	92	10	15	25



TABLE V—CONTINUED.

COUNTIES.	Admitted during bien-nial period.			Admitted from the beginning.			REMAINING.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Clinton.....	12	19	31	13	20	33	6	12	18
Crawford.....	3	4	7	3	4	7	3	2	5
Delaware.....	8	3	11	31	22	53	6	4	10
Dickinson.....	.....	.....	.....	1	2	3	1	.....	1
Dubuque.....	28	24	52	95	75	170	21	23	44
Emmet.....	.....	1	1	3	2	5	2	2	4
Fayette.....	11	8	19	35	21	56	10	7	17
Floyd.....	4	2	6	15	7	22	3	1	4
Franklin.....	6	4	10	11	12	23	3	6	9
Greene.....	4	5	9	4	5	9	4	4	8
Grundy.....	2	2	4	6	5	11	2	2	4
Hamilton.....	4	.....	4	7	3	10	3	1	4
Hancock.....	.....	.....	.....	1	2	3	.....	.....	.....
Hardin.....	1	6	7	4	20	24	1	8	9
Howard.....	2	2	4	13	6	19	6	2	8
Humboldt.....	.....	4	4	1	4	5	1	1	2
Jackson.....	10	8	18	24	16	40	1	2	3
Jones.....	7	9	16	22	21	43	3	7	10
Ida.....	.....	2	2	1	2	3	.....	1	1
Kossuth.....	5	.....	5	8	2	10	3	.....	3
Lyon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Linn.....	8	16	24	30	30	60	8	13	21
Marshall.....	9	2	11	20	5	25	8	3	11
Mitchell.....	2	2	4	6	9	15	1	2	3
Monona.....	8	2	10	8	2	10	5	1	6
Osceola.....	.....	.....	.....	.....	1	1	.....	.....	.....
O'Brien.....	.....	1	1	2	1	3	.....	1	1
Palo Alto.....	2	.....	2	4	3	7	2	2	4
Plymouth.....	5	.....	5	8	.....	8	3	.....	3
Pocahontas.....	.....	.....	.....	3	1	4	2	1	3
Sac.....	.....	2	2	1	2	3	.....	.....	.....
Sioux.....	1	.....	1	2	1	3	2	.....	2
Story.....	3	.....	3	5	2	7	2	2	4
Tama.....	5	6	11	13	12	25	5	6	11
Webster.....	5	6	11	13	12	25	3	1	4
Winneshiek.....	9	8	17	44	19	63	11	7	18
Winnebago.....	.....	.....	.....	2	2	4	.....	1	1
Worth.....	.....	2	2	4	3	7	1	2	3
Woodbury.....	6	3	9	12	6	18	5	1	6
Wright.....	1	1	2	2	4	6	2	2	4
State at large.....	48	11	59	87	33	120	37	10	47
Total.....	299	240	539	803	630	1433	227	223	450

TABLE VI.  
*Occupation of those admitted.*

OCCUPATION.	Biennial period.	From the begin'g.
Artist.....	1	1
Baker.....	4	4
Bartender.....	1	1
Brewer.....	1	1
Butcher.....	2	2
Blacksmith.....	5	12
Book-keeper.....	2	10
Cabinet-maker.....	1	4
Carpenter.....	5	15
Clerk.....	2	10
Cigar-maker.....	1	2
Cooper.....	1	4
Dentist.....	3	3
Domestic.....	23	60
Druggist.....	1	1
Editor.....	2	3
Engineer.....	4	4
Farmer.....	157	377
Gardener.....	2	4
Harness-maker.....	2	6
Housewife.....	160	389
Home work.....	30	54
Jeweler.....	1	2
Knife-grinder.....	1	1
Laborer.....	47	145
Landlord.....	1	1
Lawyer.....	2	8
Liveryman.....	1	2
Machinist.....	1	1
Mason.....	3	7
Merchant.....	7	21
Miller.....	1	4
Milliner.....	1	1
Miner.....	3	3
Operative.....	8	8
Painter.....	3	6
Peddler.....	3	6
Preacher.....	2	4
Physician.....	2	5
Printer.....	1	1
Railroader.....	5	7
Sailor.....	1	2
Seamstress.....	1	4
Speculator.....	2	2
Shoemaker.....	4	7
Student.....	9	15
Tailor.....	2	5
Teacher.....	10	23
Tinner.....	3	3
Tramp.....	4	7
Unknown.....	8	25
Wagon-maker.....	3	6
Washerwoman.....	2	4
Wood-carver.....	1	1
Without occupation.....	20	120
Total.....	539	1433

TABLE VII.

*Supposed or assigned cause of insanity.*

CAUSE.	BIENNIAL PERIOD.			FROM THE BEGINNING.		
	Men.	Women.	Total.	Men.	Women.	Total.
<b>CONGENITAL—</b>						
Hereditary .....	46	49	95	150	136	286
Defective mental organization .....	3	1	4	12	5	17
<b>DISEASES OF THE NERVOUS SYSTEM—</b>						
Hydrocephalus .....	1	....	1	1	....	1
Epilepsy .....	28	6	34	59	24	83
Cerebral hemorrhage .....	1	1	2	2	1	3
Cerebral congestion .....	4	3	7	5	4	9
Cerebral abscess .....	2	...	2	2	....	2
Cerebro-spinal-meningitis .....	....	....	....	1	....	1
Softening of the brain .....	....	2	2	....	2	2
Paralysis .....	1	....	1	4	....	4
Injury to the head .....	15	2	17	46	5	51
Injury to spine .....	2	....	2	2	1	3
Disease of spine .....	1	....	1	1	....	1
Sun or heat stroke .....	10	4	14	21	6	27
Exposure to excessive cold .....	....	....	....	1	....	1
Lightning stroke .....	....	....	....	....	1	1
<b>DISEASE IN GENERAL—</b>						
Fever .....	2	13	15	7	15	22
Measles .....	1	....	1	1	....	1
Syphilis .....	3	....	3	3	....	3
Rheumatism .....	....	....	....	1	....	1
Debility .....	4	6	10	12	20	32
Treatment by a quack .....	....	1	1	2	1	3
Loss of sleep .....	2	....	2	2	....	2
Opium habit .....	....	1	1	....	3	3
Use of alcoholic drinks .....	19	1	20	47	3	50
Use of tobacco .....	....	....	....	3	....	3
Masturbation .....	13	....	13	44	2	46
Excessive venery .....	1	....	1	1	1	2
Uterine disease .....	....	11	11	....	33	33
Exposure during menstrual epoch .....	....	4	4	....	6	6
Defective or suppressed menstruation .....	....	7	7	....	18	18
Early marriage .....	....	....	....	....	2	2
Disturbed gestation .....	....	....	....	....	4	4
Puerperal condition .....	....	22	22	....	37	37
Prolonged lactation .....	....	1	1	....	2	2
Too frequent child-bearing .....	....	3	3	....	9	9
Change of life .....	....	7	7	....	12	12
Senile decay .....	4	....	4	8	1	9
<b>MORAL INFLUENCE—</b>						
Jealousy .....	2	3	5	2	3	5
Disappointment .....	....	1	1	....	1	1
Imprisonment .....	1	....	1	1	....	1
Depravity .....	1	....	1	1	....	1
Spiritualism .....	....	2	2	2	5	7
Religious excitement .....	6	6	12	19	15	34
Sorrow on account of blindness .....	1	1	2	1	2	3
Fright .....	1	1	2	4	4	8
Grief .....	1	6	7	3	12	15
Desertion of companion .....	....	2	2	....	4	4

TALBE VII—CONTINUED.

CAUSE.	BIENNIAL PERIOD.			FROM THE BEGINNING.		
	Men.	Women.	Total.	Men.	Women.	Total.
MORAL INFLUENCE—Continued.						
Domestic trouble .....	11	9	20	20	31	51
Disappointed affection .....	6	6	12	13	17	30
Seduction .....	.....	1	1	.....	2	2
Loss of property .....	.....	.....	.....	11	2	13
Poverty and want .....	3	3	6	5	7	12
Pecuniary embarrassment .....	15	.....	15	26	3	29
Overwork .....	5	4	9	11	8	19
Excessive mental labor .....	2	.....	2	6	2	8
Lack of employment .....	1	.....	1	1	.....	1
Cause unknown .....	80	50	130	239	156	395
Total .....	299	240	529	803	630	1433

TABLE VIII.  
Cause of death.

CAUSE.	Men.	Women.	Total.
Acute cerebritis .....	..	2	2
Cerebral tumor .....	1	..	1
Cerebral abscess .....	1	..	1
Cerebral embolism .....	..	1	1
Cerebral hemorrhage .....	4	4	8
Epilepsy .....	5	1	6
Posterior spinal sclerosis .....	1	..	1
General paralysis .....	4	..	4
Acute delirious mania .....	1	..	1
Exhaustion from acute mania .....	4	4	8
Exhaustion from chronic mania .....	3	6	9
Exhaustion from old age .....	1	2	3
Emphysema .....	1	..	1
Hydrothorax .....	1	..	1
Phthisis .....	9	5	14
Phthisis melanosis .....	..	1	1
Fatty degeneration of the heart .....	..	1	1
Chronic hepatitis .....	..	1	1
Dysentery .....	1	1	2
Septicaemia .....	..	1	1
Peritonitis .....	..	1	1
Erysipelas .....	..	1	1
Exhaustion from syphilis .....	1	..	1
Suicide .....	..	2	2
Total .....	38	34	72

TABLE IX.

*Number of times patients have been admitted, with results.*

DISCHARGED.	No. of admissions.				Total.
	First.	Second.	Third.	Fourth.	
Recovered .....	22	7	1	1	29
Eloped .....					
Request of friends—harmless.....					
Order of Trustees—harmless and incurable.....					
Order of county commissioners of insanity.....					
Order of judge of district court .....					
Died .....					
Total discharged.....					
Remaining in Hospital.....					
Total admitted.....	1				

TABLE X.

*Condition and prospects of patients remaining at the end of the period.*

FORM OF INSANITY.	Favorable.	Unfavorable.	Total.
Mania acute.....	22	7	29
Mania chronic.....	6	213	219
Mania recurrent.....	..	6	6
Melancholia .....	18	15	33
Dementia .....	2	146	148
Imbecility .....	..	12	12
General paralysis .....	..	3	3
Total .....	48	402	450

## STEWARD'S REPORT.

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*To the Board of Trustees of the Iowa Hospital for Insane at Independence, Iowa:*

GENTLEMEN—I have the honor to transmit herewith the fourth biennial report of the Steward of this institution, embracing a classified schedule of current expenses, with a list of vouchers covering the same. Also, a statement of moneys received by the Steward, an enumeration of the products of the farm and garden, an inventory of the farm stock, implements, and utensils, a statement showing number of hogs slaughtered and sold, and their value, beef furnished from dairy, calves sold, and their value, a list of plants in green-house, and their value, a schedule of general supplies, and fuel, and a list of the officers and employes, showing how employed, and salary paid to each.

All of which is respectfully submitted.

NOYES APPELMAN, *Steward.*

*Independence, September 30, 1879.*

## CURRENT EXPENSE FUND.

*Exhibit of Steward for year ending September 30, 1878.*

## RECEIPTS.

From balance on hand Oct. 1, 1877.....		\$ 3,001.09
From Treasurer of State.....	\$48,500.00	
From articles sold.....	119.64	
From board and clothing (paid by friends of patients)...	1,149.91	
From hides sold.....	500.11	
From interest on State warrants.....	54.80	
	<hr/>	\$50,324.46
		<hr/>
		\$53,325.55

## EXPENDITURES.

For meats and fish.....	\$ 4,627.03	
For breadstuffs.....	3,310.31	
For fruits .....	904.94	
For tea and coffee.....	1,600.09	
For sugar and syrup.....	2,310.64	
For butter, eggs, and cheese.....	2,526.96	
For sundry groceries.....	1,984.43	
For medicinal supplies.....	1,354.89	
For postage and stationery.....	514.31	
For clothing.....	3,118.21	
For library and diversions.....	153.00	
For furniture and furnishing.....	1,975.11	
For repairs.....	1,160.65	
For hardware.....	508.25	
For contingencies.....	596.76	
For Visiting Committee.....	424.00	
For glass, oils, and paints.....	146.59	
For farm.....	1,129.77	
For feed.....	112.22	
For lights.....	366.29	
For fuel.....	12,389.64	
For salaries and wages.....	22,116.18	
	<hr/>	\$63,330.27
Vouchers for quarter ending Sept. 30, 1878, unpaid.....	17,357.79	
	<hr/>	45,972.48
		<hr/>
Balance on hand Sept. 30, 1878.....		\$7,353.07

## CURRENT EXPENSE FUND.

*Exhibit of Steward for year ending September 30, 1879.*

## RECEIPTS.

From balance on hand Oct. 1, 1878.....		\$ 7,353.07
From Treasurer of State.....	\$70,664.01	
From articles sold.....	579.02	
From board and clothing of patients (paid by friends).....	801.62	
From hides sold.....	540.93	
From interest on State warrants.....	125.28	
	<hr/>	72,710.86
		<hr/>
		\$80,063.93

## EXPENDITURES.

For vouchers for quarter ending Sept. 30, 1878, unpaid.....	\$17,357.79	
For meats and fish.....	4,782.89	
For breadstuffs.....	3,657.70	
For fruits.....	797.15	
For tea and coffee.....	1,708.33	
For sugar and syrup.....	2,367.31	
For butter, eggs, and cheese.....	3,852.24	
For sundry groceries.....	2,116.48	
For medicinal supplies.....	1,667.67	
For postage and stationery.....	451.07	
For clothing.....	3,766.42	
For library and diversions.....	97.65	
For furniture and furnishing.....	2,945.93	
For repairs.....	4,180.45	
For green-house.....	139.90	
For hardware.....	584.55	
For contingencies.....	651.35	
For Visiting Committee.....	415.00	
For glass, oils, and paints.....	516.98	
For farm.....	715.44	
For feed.....	245.37	
For lights.....	782.53	
For fuel.....	7,269.10	
For salaries and wages.....	22,729.75	
	<hr/>	\$83,799.05
Vouchers for quarter ending Sept. 30, 1879, unpaid.....	17,242.42	
	<hr/>	66,556.63
		<hr/>
Balance on hand Sept. 30, 1879.....		\$13,507.30



The farm contains three hundred and twenty acres, lying in the form of the letter T, the quarter section occupied by the Hospital and other buildings being square, with an eighty to the east and an eighty to the west, extending one-half mile each way on the south side of the farm. On one hundred and twenty acres are raised corn, oats, potatoes, beans, and garden stuff. About thirty acres are occupied by the brick-yards; and the balance is in pasture and meadow land.

*Products of farm and garden for 1878:*

Asparagus, 431 bunches, at 5 cents.....	\$ 21.55
Beet greens, 32 bushels, at 50 cents.....	16.00
Beets, 427 bushels, at 50 cents .....	213.50
Beans, string, 33 bushels, at 75 cents.....	24.75
Beans, small white, 29 bushels, at \$1.00 .....	29.00
Beans, Lima, ½ bushel, at \$1.50.....	.75
Cauliflower, 22 heads, at 10 cents.....	2.20
Cucumbers, 20,100, at \$2.00 per thousand.....	40.20
Cabbages, 2,608 heads, at 5 cents .....	130.40
Cherries, 5¾ bushels, at \$2.50.....	14.35
Currants, 2 bushels, at \$1.60 .....	3.20
Carrots, 93½ bushels, at 50 cents.....	46.75
Corn, sweet, 158 bushels, at 50 cents.....	79.00
Cantalopes, 125, at 3 cents .....	3.75
Crab-apples, 3½ bushels, at \$1.00 .....	3.50
Celery stalks, 1,500, at 8 cents.....	120.00
Corn, 1,551 bushels, at 20 cents.....	310.20
Corn, pop, 24 bushels, at 50 cents.....	12.00
Egg-plant, 20, at 5 cents .....	1.00
Hay, 100 tons, at \$4.00 .....	400.00
Kohl-rabi, 13½ bushels, at 50 cents .....	6.75
Lettuce, 46½ bushels, at 50 cents .....	23.25
Milk, 12,975 gallons.....	2,267.20
Melons, 254, at 5 cents.....	12.70
Onions, 330 bunches, at 3 cents.....	9.90
Onions, 45 bushels, at 75 cents.....	33.75
Oats, 1,189 bushels, at 20 cents.....	237.80
Pumpkins, 900, at 1 cent.....	9.00
Potatoes, 2,408½ bushels, at 30 cents.....	722.55
Parsley, 3¼ bushels, at \$1.00.....	3.25
Peas, 98 bushels, at \$1.00 .....	98.00
Parsnips, 160 bushels, at 50 cents .....	80.00
Raspberries, 682 quarts, at 12½ cents .....	85.25
Radishes, 26½ bushels, at 50 cents .....	13.25
Radish (horse), 12 bushels, at 50 cents...	6.00
Rhubarb, 458 bunches, at 3 cents .....	13.74
Squashes, summer, 969, at \$2.00 per hundred.....	19.38
Squashes, winter, 650, at 7 cents .....	45.50
Spinach, 18½ bushels, at 50 cents .....	9.25
Strawberries, 2,005 quarts, at 12½ cents.....	250.62
Salsify, 20 bushels, at 75 cents .....	15.00
Sage, 15 pounds, at 50 cents.....	7.50
Straw, 20 tons, at \$2.00 .....	40.00
Tomatoes, 205 bushels, at 75 cents .....	153.75
Turnips, 40 bushels, at 20 cents.....	8.00
Total.....	\$ 5,643.49

*Products of farm and garden for 1879:*

Asparagus, 387 bunches, at 5 cents.....	\$ 19.35
Beans, string, 89 bushels, at 75 cents.....	66.75
Beans, white navy, 40 bushels (estimated), at \$1.00.....	40.00
Beets, 220 bushels (estimated), at 50 cents.....	110.00
Cauliflower, 24 heads, at 10 cents.....	2.40
Cabbage, 2,845 heads, at 5 cents.....	142.25
Cherries, 3 pecks, at 50 cents.....	1.50
Cucumbers, 10,570, at 20 cents per hundred.....	21.14
Carrots, 150 bushels (estimated), at 50 cents.....	75.00
Corn, sweet, 44½ bushels, at 50 cents.....	22.25
Cantalopes, 26, at 3 cents.....	.78
Corn, 1,500 bushels (estimated), at 20 cents.....	300.00
Celery, 590 stalks, at 8 cents.....	47.20
Grapes, 307 pounds, at 5 cents.....	15.35
Hay, 100 tons, at \$4.00.....	400.00
Lettuce, 48¼ bushels, at 50 cents.....	24.12
Milk, 17,409 gallons.....	3,068.05
Melons, 736, at 5 cents.....	36.80
Oats, 1,455 bushels, at 16 cents.....	232.80
Onions, 49¾ bushels, at 75 cents.....	37.32
Parsley, 5 bushels, at \$1.....	5.00
Peas, 71 bushels, at \$1.....	71.00
Potatoes, 2,340 bushels, at 25 cents.....	585.00
Parsnips (estimated), 125 bushels, at 50 cents.....	62.50
Peppers, 1 bushel.....	2.00
Pumpkins, 500, at 1 cent.....	5.00
Radishes, 20¼ bushels, at 50 cents.....	10.12
Rhubarb, 254 bunches, at 3 cents.....	7.62
Raspberries, 430 quarts, at 10 cents.....	43.00
Radishes, 25 bushels, at 50 cents.....	12.50
Radish, horse, 10 bushels (estimated), at 50 cents.....	5.00
Rutabagas, 100 bushels (estimated), at 25 cents.....	25.00
Spinach, 13 bushels, at 50 cents.....	6.50
Strawberries, 2,948 quarts, at 10 cents.....	294.80
Squash, summer, 1,793, at 2 cents.....	35.86
Salsify, 15 bushels, at 75 cents.....	11.25
Sage, 20 pounds, at 50 cents.....	10.00
Straw, 40 tons, at \$2.....	80.00
Tomatoes, 176¾ bushels, at 75 cents.....	132.57
Turnips, white, 50 bushels (estimated), at 20 cents.....	10.00
Total.....	\$ 6,077.78

*The following is for biennial period:*

Beef furnished Hospital, 6,070 pounds.....	\$ 151.64
Veal furnished Hospital, 422 pounds.....	14.74
Pork furnished Hospital, 15,885 pounds.....	431.65
Pigs sold, 3.....	17.00
Pork sold, 9,200 pounds.....	284.00
Calves sold, 25 (not considered profitable to raise).....	37.00
Total.....	\$ 936.56

## Inventory of supplies on hand:

Groceries and provisions .....	\$ 1,482.25
Fruits .....	315.02
Pickles... ..	83.05
Dry goods and notions.....	3,030.17
Boots, shoes and slippers.....	469.65
Cutlery, crockery and glassware.....	324.21
Drugs and medicines.....	500.00
Clothing (men's).....	858.32
Clothing (women's).....	191.00
Fuel ....	455.00
Coke (gas purposes) .....	96.00
Oil (gas purposes) .....	180.00
Beef cattle.....	442.48
Grain not raised on farm.....	12.50
Fish .....	44.00
Soft soap.....	60.00
Hard soap.....	187.00
Breadstuffs .....	100.00
Oats raised on farm.....	224.00
Corn raised on farm (estimated), 1,500 bushels, at 20 cents.....	300.00
Potatoes and other vegetables (estimated) .....	1,200.00
Total .....	\$ 10,554.65

## Inventory of farm stock and implements:

Eight brood sows.....	\$ 80.00
Thirty-three fat hogs .....	297.00
Forty-six pigs (under six months).....	115.00
One Berkshire boar.....	10.00
One calf .....	10.00
Twenty-five cows.....	625.00
One Devon bull.....	50.00
Six horses .....	540.00
Two lumber wagons.....	100.00
One lumber wagon.....	35.00
Two lumber wagons .....	25.00
One buggy.....	100.00
One patients' wagon .....	100.00
One buckboard wagon.....	15.00
One patients' sleigh .....	70.00
Two pair of bob-sleighs .....	60.00
One mower .....	25.00
One horse-rake.....	20.00
Two stirring plows .....	25.00
One breaking plow.....	7.00
One corn plow .....	5.00
Two shovel plows.....	14.00
One corn cultivator.....	20.00
Two drags .....	10.00
One roller.....	20.00
Three sets double harness .....	60.00
One single harness.....	21.00
One single harness .....	10.00
One straw-cutter.....	15.00
One platform scales.....	50.00
Lap and buffalo robes.....	25.00
One lawn-mower.....	15.00
Hoes, shovels, spades and other utensils.....	66.00
Total.....	\$ 2,640.00

## List of plants in green-house:

Acharanthus, 2 at 25 cents.....	\$ .50
Abrobia, 5 at 20 cents .....	1.00
Alysum sweet, 20 at 10 cents.....	2.00
Artemisia, 6 at 10 cents .....	.60
Abutilon, 2 at 25 cents .....	.50
Abutilon, small, 2 at 10 cents.....	.20
Begonias, 8 at 25 cents .....	2.00
Begonia, 1 at.....	1.00
Calla lilies, 4 at 75 cents.....	3.00
Coleus, large, 14 at 50 cents.....	7.00
Carnations, 5 at 40 cents.....	2.00
Carnations, 16 at 15 cents.....	2.40
Eupatowm, 3 at 25 cents.....	.75
Fuchsias, 7 at 25 cents .....	1.75
Fuchsias, small, 10 at 10 cents.....	1.00
Fever-few, 2 at 25 cents.....	.50
Geraniums, large, 30 at 25 cents .....	7.50
Geraniums, small, 70 at 10 cents.....	7.00
Glaucium, 2 at 75 cents.....	1.50
Heliotropes, 4 at 50 cents.....	2.00
Heliotropes, 20 at 10 cents.....	2.00
Hanging baskets, 5 at 75 cents.....	3.75
Hibisones, small, 4 at 10 cents.....	.40
Jasmines, 2 at 25 cents .....	.50
Maderia bulbs.....	1.00
Minulas, 2 at 10 cents.....	.20
Oleander, 1 at.....	1.50
Petunias, double, large, 10 at 50 cents.....	6.00
Petunias, small, 20 at 10 cents .....	2.00
Pansies, 20 at 15 cents.....	3.00
Perella, 2 at 15 cents .....	.30
Passion vine, 4 at 20 cents.....	.80
Roses, 10 at 50 cents.....	5.00
Salvias, large, splendors, 12 at 75 cents.....	9.00
Salvias, small, 10 at 10 cents.....	1.00
Stevens, 3 at 10 cents.....	.30
Violets, English, 6 at 15 cents ..	.90
Verbenas, 12 varieties.....	1.00
Total .....	\$ 82.85

EXHIBIT

*Of special appropriation by the Seventeenth General Assembly, for contingent expenses, to September 30, 1879.*

RECEIPTS.

From Auditor of State.....\$ 812.92

EXPENDITURES.

For new flues from boilers to smoke stack .....\$417.92  
For well..... 395.00—\$812.92

LIST OF OFFICERS AND EMPLOYES, SEPTEMBER 30, 1879.

NAMES.	HOW EMPLOYED.	SALARY.
A. Reynolds .....	Superintendent .....	\$ 2,000 per annum.
G. H. Hill .....	Assistant Physician.....	900 per annum.
H. G. Brainard .....	Assistant Physician.....	600 per annum.
Noyes Appelman .....	Steward .....	1,000 per annum.
Mrs. L. M. Gray .....	Matron .....	500 per annum.
Chas. H. Hartwell .....	Apothecary .....	400 per annum.
A. D. Guernsey.....	Engineer .....	60 per month.
Peter Walters.....	Fireman.....	30 per month.
John Dorsett .....	Butcher.....	37 per month.
Chas. L. Thomas, Jr.....	Gardener.....	33 per month.
Hansen Lars.....	Barn-man.....	26 per month.
James Hickey .....	Hack-driver.....	26 per month.
Chas. Thomas, Sr.....	Night watch.....	37 per month.
H. A. Cramer.....	Carpenter .....	40 per month.
Elias Peck.....	Teamster .....	18 per month.
John Thomas.....	Barn-boy .....	12 per month.
Schank Weart .....	Teamster .....	18 per month.
Roger McGill .....	Fireman .....	30 per month.
Geo. Bridenbach .....	Baker .....	45 per month.
Joseph Landis .....	Assistant baker.....	16 per month.
James Netcott.....	Carman.....	26 per month.
Maggie O'Conner .....	Washer .....	11 per month.
Agnes Netcott.....	Cook.....	16 per month.
Annie E. Willard.....	Seamstress.....	15 per month.
Jane Thomas .....	Washer .....	14 per month.
Mary O'Conner .....	Ironer .....	11 per month.
Rosa Roche.....	Office girl.....	10 per month.
Anna Stites .....	Ironer.....	11 per month.
Eva Alta Yount .....	Dining-room.....	10 per month.
Mary Wenderling.....	Washer.....	11 per month.
Sarah Thomas .....	Ironer .....	14 per month.
V. W. Peck .....	Assistant carman .....	16 per month.

## LIST OF OFFICERS AND EMPLOYES—CONTINUED.

NAMES.	HOW EMPLOYED.	SALARY.
Sophia Walters .....	Washer .....	\$ 11 per month.
Katie Longnecker .....	Dining-room .....	10 per month.
Josie Smith .....	Chambermaid .....	10 per month.
Katie Gallagan .....	Cook ....	14 per month.
Mary Gallagan .....	Dining-room .....	9 per month.
A. M. Wackerbarth .....	Seamstress .....	14 per month.
Martha Boyack .....	Kitchen .....	8 per month.
Victoria Wendling .....	Kitchen .....	8 per month.
Maggie Traufler .....	Kitchen .....	8 per month.
Alzada Wolls .....	Kitchen .....	8 per month.
C. W. Stites .....	Farmer .....	26 per month.
D. H. Feister .....	Supervisor .....	30 per month.
Conrad Mathis .....	Attendant .....	24 per month.
J. W. Galentin .....	Attendant .....	22 per month.
Fred Kimball .....	Attendant .....	22 per month.
T. C. McKenzie .....	Attendant .....	22 per month.
F. S. Rosencrans .....	Attendant .....	22 per month.
G. O. Miller .....	Attendant .....	22 per month.
P. J. Gallagan .....	Attendant .....	22 per month.
W. J. Martin .....	Attendant .....	20 per month.
Graham Slack .....	Attendant .....	19 per month.
J. S. Shaffer .....	Attendant .....	19 per month.
Chas. Munning .....	Attendant .....	18 per month.
R. O. Woodward .....	Attendant .....	18 per month.
William Innis .....	Attendant .....	18 per month.
W. W. Feister .....	Attendant .....	22 per month.
Fred Tiellebein .....	Attendant .....	19 per month.
William Shaffer .....	Attendant .....	19 per month.
Mary Sisson .....	Supervisor .....	25 per month.
A. M. Allen .....	Night watch .....	18 per month.
Alice Burroughs .....	Night watch .....	18 per month.
Fannie Price .....	Attendant .....	16 per month.
Sarah J. Ellis .....	Attendant .....	16 per month.
Mary Boyack .....	Attendant .....	16 per month.
Sarah Bouk .....	Attendant .....	18 per month.
Clara Colman .....	Attendant .....	18 per month.
Alice O'Conner .....	Attendant .....	16 per month.
Julia Davies .....	Attendant .....	16 per month.
Kate Klotzbach .....	Attendant .....	16 per month.
Edith Somer .....	Attendant .....	15 per month.
Frankie Fisher .....	Attendant .....	15 per month.
Orlinda Feathers .....	Attendant .....	14 per month.
Marcella Roth .....	Attendant .....	14 per month.
Jessie Boyack .....	Attendant .....	13 per month.
E. H. Thomas .....	Attendant .....	13 per month.
Mary Nicholson .....	Attendant .....	16 per month.
Anna Stunma .....	Attendant .....	12 per month.
Alice Green .....	Attendant .....	12 per month.
Mary E. Wood .....	Attendant .....	12 per month.
Fannie Healey .....	Attendant .....	12 per month.
Emma Rosencrans .....	Attendant .....	12 per month.

Number of employees, eighty-three.

## LIST OF VOUCHERS

*For biennial period ending September 30, 1879.*

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1	H. B. Mason & Co.....	\$ 12 00	46	Frank Megow... ..	\$ 3 87
2	A. B. Eaton.....	18 56	47	O. Marquette.....	36 90
3	John McKenna.....	12 67	48	Wm. Toman.....	58 20
4	R. S. Searls.....	7 50	49	John Klotzbach.....	4 50
5	A. C. Hamilton.....	7 20	50	Ill. Central R. R. Co....	23 85
6	Martin Dingsley.....	7 54	51	G. H. Robinson.....	19 49
7	Dr. A. Reynolds.....	33 08	52	J. C. Litts.....	18 27
8	E. Cobb.....	353 20	53	Patrick O'Shea.....	54 01
9	E. Cobb.....	491 35	54	A. S. Yeomans.....	49 28
10	W. B. Rossell.....	2 50	55	Foster Bros.....	214 04
11	C. G. Woodruff.....	362 50	56	B., C. R. & N. R. R. Co..	924 60
12	J. H. Carey.....	24 37	57	W. B. Smeallie.....	7 00
13	O. P. King.....	46 75	58	Pay roll.....	1400 88
14	W. P. Large.....	105 16	59	James Gray.....	7 90
15	T. W. Fawcett.....	47 00	60	H. B. Mason & Co.....	12 00
16	Fisher Bros.....	23 81	61	J. C. McGowan.....	16 52
17	S. Waggoner.....	4 00	62	W. M. Young.....	31 80
18	John Wiley.....	14 70	63	James Young.....	5 40
19	Independence Mills Co..	90 65	64	Martin Dingsly.....	18 62
20	John Wengert.....	11 25	65	F. M. Harris.....	59 37
21	John McGready.....	5 25	66	James Hamilton....	4 50
22	Williams & Son.....	122 74	67	S. B. Olney.....	27 50
23	M. & V. W. Davis.....	33 52	68	C. H. Losure.....	8 84
24	Palmer, Winall & Co....	6 75	69	S. Hulett.....	4 68
25	Union Oil Co.....	25 25	70	L. A. Main.....	16 45
26	Crane Bros. M'f'g Co....	29 10	71	A. Reynolds.....	35 11
27	Gray Bros.....	197 71	72	A. Reynolds.....	450 00
28	J. L. Mott, Iron Works..	23 45	73	G. B. Smeallie.....	250 00
29	Chas. J. Field.....	27 00	74	G. H. Hill.....	200 00
30	Harper, Reed & Co.....	24 48	75	Mrs. L. M. Gray.....	125 00
31	Stuart & Douglass.....	11 00	76	H. A. Hurlbut & Co....	121 44
32	Pomeroy & Olmstead..	18 50	77	Fisher Bros.....	35 07
33	John Mehlhop.....	41 49	78	John Mehlhop.....	348 76
34	West Union Cheese Fac.	13 94	79	Wemott, Howard & Co.	124 75
35	S. M. Leach.....	109 75	81	J. T. Olmstead.....	6 95
36	Charles Thomas.....	18 56	82	Harper, Reed & Co.....	10 80
37	C. H. Losure.....	6 40	83	H. & H. C. Fullerton...	1 50
38	W. H. H. Morse.....	190 85	84	Crane Bros. M'f'g Co....	9 31
39	Kenyon & Tabor.....	32 86	85	Buchanan Co. Bulletin..	38 50
40	C. R. Wallace.....	15 33	86	Chas. Thomas.....	335 52
41	T. J. Marinus.....	49 77	87	Kenyon & Tabor.....	49 90
42	American Express Co..	9 00	88	Williams & Son.....	86 48
43	A. Hathaway.....	3 90	89	W. H. H. Morse.....	638 94
44	Independence M'f'g Co.	2 50	90	S. Waggoner.....	6 80
45	E. B. Conable.....	1 20	91	Z. Stout.....	98 81



## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
92	Independence Man'g Co.	\$ 23 90	145	Ill. Cent. R. R. Co.	\$ 24 19
93	John Wiley	21 00	146	W. T. Dale	25 40
94	Smale Bros	5 00	147	American Express Co	10 50
95	James C. Litts	14 13	148	Davis & Son	10 36
96	Patrick O'Shea	15 58	149	John J. McGready	7 00
97	A. S. Yeoman	15 58	150	Barber & Kellogg	9 88
98	American Express Co.	14 20	151	Wm. Toman, P. M.	10 50
99	G. H. Robinson	28 23	152	Kenyon & Tabor	94 48
100	W. Wengert	3 12	153	W. H. H. Morse	68 91
101	B., C. R. & N. R. R. Co.	1875 11	154	C. R. Wallace	52 26
102	W. G. Donnan	80 17	155	S. Waggoner	11 00
103	Foster Bros	473 95	156	Williams & Son	73 82
104	Independence Mills Co.	289 36	157	A. Reynolds	20 50
105	Ill. Central R. R. Co.	9 60	158	Independence Mills Co.	187 90
106	Charles Kerwer	5 50	159	Fisher Bros	46 76
107	J. A. Rice	25 00	160	A. Hathaway	11 00
108	Hugh McClernon	14 25	161	E. C. Hartley	9 33
109	T. Edwards & Co.	3 15	162	John Mehlhop	513 12
110	H. B. Glover & Co.	35 11	163	H. A. Hurlbut & Co.	134 12
111	G. B. Smeallie	1 75	164	Crane Bros. Man'g Co.	38 57
112	Pay roll	1369 20	165	Palmer, Winall & Co	6 50
113	H. B. Mason & Co.	12 00	166	Stuart & Douglass	11 00
114	W. M. Young	10 20	167	Oakley & Keating	17 78
115	Samuel Hulett	8 41	168	Union Oil Co	63 85
116	Eddie Boggs	13 00	169	Foster Bros	549 48
117	James Young	7 92	170	B., C. R. & N. R. R. Co.	1228 41
118	A. B. Eaton	29 57	171	L. Z. Holderman	14 97
119	Martin Dingsley	12 00	172	W. B. Rossell	10 96
120	John Smith	40 00	173	G. H. Robinson	32 72
121	Mrs. A. B. Eaton	8 73	174	P. O'Shea	32 44
122	C. H. Losure	8 82	175	A. S. Yeomans	36 40
123	C. H. Losure	26 04	176	J. C. Litts	23 18
124	L. A. Main	14 98	177	Henry Pfozter	6 55
125	Patrick Lundy	42 75	178	R. McGill	22 56
126	Chas. R. Smith	13 63	179	Pay roll	1327 51
127	Chas. C. Smith	11 80	180	J. C. Rich	130 31
128	Geo. Fisher	25 25	181	G. B. Smeallie	105 50
129	John S. Bouck	15 48	182	David Borst	3 75
130	James Foreman	10 60	183	Patrick Connolly	5 07
131	C. M. Burritt	9 36	184	Patrick Kane	10 62
132	Wm. M. Young	28 10	185	Martin Dingsley	16 00
133	S. B. Olney	27 50	186	Lafayette Young	36 40
134	C. H. Losure	8 95	187	George Prince	1 50
135	S. Hulett	2 40	188	M. W. Mathis	4 92
136	Jas. Young	2 73	189	C. M. Burritt	5 90
137	J. C. McGowen	20 25	190	W. F. Curtis	11 12
138	M. & V. W. Davis	16 29	191	John Manwell	3 06
139	H. B. Mason & Co.	12 00	192	J. C. McGowan	4 41
140	M. & V. W. Davis	22 95	193	S. B. Olney	27 50
141	G. W. Harner	6 45	194	J. C. Litts	8 32
142	C. E. Benson	13 43	195	H. B. Mason & Co.	12 00
143	Peter Ferney	5 23	196	Thomas Jewell	22 00
144	Z. Stout	11 62	197	G. W. Harner	4 60



## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
198	Samuel Hulett .....	\$ 7 80	251	Pay roll .....	1330 62
199	James Gray .....	83	252	John H. McKay .....	188 45
200	C. H. Losure .....	1 57	253	H. B. Mason & Co .....	12 00
201	A. Reynolds .....	33 85	254	E. L. Hagerman .....	2 70
202	H. B. Bryant .....	22 50	255	Fonda & Beach .....	3 50
203	James Beckley .....	1 89	256	A. B. Eaton .....	3 24
204	American Express Co ..	2 05	257	Martin Dingsley .....	7 25
205	Ill. Cent. R. R. Co .....	27 39	258	John H. McKay .....	44 10
206	Wm. Toman, P. M. ....	32 80	259	J. Brandel .....	32 50
207	B., C. R. & N. R. R. Co..	1262 24	260	S. F. Searls .....	99 60
208	Independence Mills Co..	326 00	261	Fonda & Beach .....	8 75
209	Kenyon & Tabor .....	31 26	262	A. D. Gurnsey .....	25 20
210	Bain & Stites .....	280 42	263	C. M. Burritt .....	6 30
211	Fisher Bros .....	207 14	264	Patrick Connolly .....	5 04
212	Tabor & Son .....	1 75	265	G. W. Watkins .....	7 40
213	Davis & Son .....	7 60	266	S. B. Olney .....	27 50
214	Z. Stout .....	21 55	267	George W. Carr .....	262 99
215	C. F. Herrick .....	1 85	268	V. R. Beach .....	6 50
216	C. R. Wallace .....	16 44	269	Fisher Brothers .....	148 05
217	J. Barnett & Co .....	8 05	270	Clark & Webber .....	3 50
218	John Wiley .....	6 90	271	Williams & Son .....	1 35
219	Hugh McClernon .....	5 35	272	A. B. Clarke .....	2 15
220	A. Hathaway .....	10 00	273	R. R. Plane .....	1 00
221	W. T. Dale .....	13 75	274	Kenyon & Tabor .....	37 69
222	John McGrady .....	8 00	275	George Hovey .....	75
223	Clark & Webber .....	7 25	276	Hugh McClernon .....	2 55
224	E. T. Williams .....	12 67	277	Independence M'fg Co..	10 30
225	Alexander Webster .....	2 00	278	A. Hathaway .....	1 75
226	A. S. Yeomans .....	8 45	279	John Wiley .....	3 10
227	W. Loisuer .....	6 77	280	Wm. Toman, P. M. ....	10 60
228	Mrs. A. B. Eaton .....	1 80	281	H. A. Hurlbut .....	234 47
229	Geo. Watkins .....	5 00	282	Lawton & Post .....	4 50
230	— Wengart .....	5 86	283	A. H. Frank .....	3 40
231	— Bryant .....	11 85	284	Tabor & Son .....	1 65
232	Morris Tasker & Co....	24 63	285	John Barnett & Co. ....	18 71
233	W. P. Large .....	18 25	286	Bain & Stites .....	52 00
234	Mart Alger .....	4 00	287	A. L. Williston .....	11 25
235	Marinius & Merrill .....	47 80	288	Edward L. Wilson .....	51 00
236	John Mehlhop .....	95 38	289	John M. Fisher .....	18 00
237	Crane Bros .....	7 75	290	Harper, Reed & Co. ....	46 91
238	Wemott, Howard & Co	59 65	291	G. W. Harner .....	7 02
239	Gray Brothers .....	266 81	292	O. Marquette .....	9 35
240	Harper, Reed & Co .....	13 85	293	Jesse Gray .....	4 50
241	Field, Leiter & Co .....	315 11	294	T. S. Stone .....	8 10
242	Field, Leiter & Co .....	51 59	295	Independence Mills Co..	187 25
243	P. O'Shea .....	53 37	296	J. C. Rich .....	21 33
244	G. H. Robinson .....	63 39	297	M. & V. W. Davis .....	3 78
245	M. & V. W. Davis .....	9 23	298	American Express Co ..	14 05
246	Foster Brothers .....	675 44	299	Samuel Hulett .....	3 99
247	D. H. Brown & Co .....	7 00	300	W. F. Curtis .....	8 47
248	V. R. Beach .....	3 50	301	W. M. Young .....	21 78
249	Independence M'fg Co..	8 77	302	W. F. Dale .....	7 05
250	George Hovey .....	3 50	303	John T. Hancock & Co..	8 15

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
304	James Vick.....	\$ 30 05	357	Independence M'fg Co. \$	16 05
305	A. Reynolds.....	450 00	358	Frank Megow.....	20 61
306	Mrs. L. M. Gray.....	125 00	359	Newton Bros.....	12 00
307	G. H. Hill.....	225 00	360	John Wiley.....	50 64
308	A. Reynolds.....	31 58	361	O. Marquette.....	17 00
309	Stuart & Douglas.....	5 00	362	Foster Bros.....	47 13
310	Noyes Appelman.....	147 25	363	P. O. Shea.....	2 98
311	Gray Brothers.....	255 29	364	G. H. Robinson.....	3 63
312	C. R. Wallace.....	13 90	365	John Mehlhop.....	6 24
313	Illinois Central R. R. Co.	9 60	366	Kenyon & Tabor.....	23 76
314	Burham & Sherwood.....	3 00	367	Fisher Bros.....	56 26
315	James Young.....	2 21	368	W. T. Dale.....	17 95
316	G. H. Robinson.....	44 18	369	J. Evers.....	8 10
317	P. O. Shea.....	37 09	370	A. H. Frank.....	5 90
318	Foster Bros.....	361 49	371	B., C. R. & N. R. R. Co..	28 55
319	B., C. R. & N. R. R. Co..	830 08	372	John Wengert.....	4 25
320	Pay-roll.....	1327 10	373	H. B. Mason & Co.....	12 00
321	W. G. Donnan.....	93 11	374	C. R. Wallace.....	11 85
322	H. B. Mason & Co.....	12 00	375	Pay-roll.....	1358 87
323	A. B. Eaton.....	5 46	376	Fonda & Brace.....	8 23
324	S. W. Noyes.....	51 02	377	W. M. Young.....	12 53
325	Chas. Gilmore.....	28 12	378	John McKenna.....	4 47
326	C. E. Miller.....	56 55	379	John McKenna.....	8 00
327	S. B. Olney.....	27 50	380	Ella Delaney.....	3 06
328	E. Wilson.....	40 00	381	M. & V. W. Davis.....	15 38
329	Joseph Patterson.....	80 00	382	Urbana Wine Co.....	27 50
330	Thomas Jewell.....	19 00	383	John McKenna.....	6 21
331	Fonda & Beach.....	2 03	384	Samuel Hulett.....	26 50
332	C. G. Woodruff.....	52 53	385	S. B. Olney.....	27 50
333	Samuel Hulett.....	7 34	386	T. W. Fawcett.....	45 00
334	James Hickey.....	9 40	387	Mrs. L. S. Kinkade.....	29 00
335	James Gray.....	1 53	388	Mrs. A. B. Eaton.....	4 95
336	Wm. Toman.....	43 30	389	J. S. Bouck.....	8 75
337	N. B. Bryant.....	20 85	390	T. S. Stone.....	29 52
338	W. F. Curtis.....	9 54	391	J. F. McKenzie.....	35 50
339	A. Reynolds.....	32 60	392	L. B. Stevens.....	27 00
340	A. B. Eaton.....	5 28	393	T. S. Stone.....	64 45
341	Patrick Connolly.....	4 80	394	James Mitchell.....	36 00
342	J. C. McGowan.....	9 67	395	Samuel Hulett.....	10 10
343	J. D. Sharp.....	8 50	396	James Gray.....	38 50
344	M. & V. W. Davis.....	5 67	397	John McKenna.....	9 52
345	Martin Dingsley.....	48	398	J. C. McGowan.....	11 98
346	J. S. Bouck.....	93	399	G. W. Harner.....	12 78
347	T. S. Stone.....	2 97	400	M. & V. W. Davis.....	45 09
348	G. W. Harner.....	2 88	401	A. Reynolds.....	40 64
349	Independence Mills Co.	214 95	402	Ill. Cent. R. R. Co.....	20 90
350	American Express Co..	1 60	403	C. H. Losure.....	2 79
351	W. P. Large.....	38 82	404	John Wiley.....	2 40
352	Chamberlin & Bachus..	15 00	405	Alex. Webster.....	3 75
353	Gray Bros.....	14 11	406	Bain & Stites.....	332 20
354	S. Waggoner.....	4 35	407	Fisher Bros.....	74 05
355	Bain & Stites.....	289 92	408	John McGready.....	2 95
356	Ill. Cent. R. R. Co.....	18 10	409	W. F. Dale.....	32 85

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
410	O. Marquette.....	\$ 1 70	463	James Young .....	\$ 23 67
411	C. R. Wallace.....	6 70	464	L. M. Whitney .....	22 72
412	S. Waggoner.....	1 38	465	S. B. Olney .....	27 50
413	Harper, Reed & Co.....	65 31	466	J. C. McGowan.....	26 02
414	Charles J. Field .....	5 40	467	A. Reynolds.....	24 70
415	Stuart & Douglas.....	5 00	468	J. S. Bouck.....	21 56
416	John Mehlhop.....	22 56	469	A. Reynolds.....	450 00
417	Union Oil Co.....	21 03	470	G. H. Hill.....	225 00
418	Lawton & Post.....	8 62	471	Mrs. L. M. Gray .....	125 00
419	H. A. Hurlbut.....	154 45	472	W. F. Curtis .....	30 23
420	Field, Leiter & Co.....	104 10	473	B., C. R. & N. R. R. Co..	176 28
421	Field, Leiter & Co.....	198 38	474	Ill. Cent. R. R. Co.....	35 75
422	Field, Leiter & Co.....	51 45	475	Noyes Appelman.....	250 00
423	Hugh McClernon.....	7 30	476	Henry W. King & Co...	43 17
424	Z. Stout.....	16 58	477	Samuel Hulett.....	12 57
425	B., C. R. & N. R. R. Co..	30	478	Charles Marsh.....	110 00
426	Clark & Webber... ..	6 75	479	American Express Co..	4 70
427	W. U. Tel. Co.....	2 45	480	Post & Sweet.....	21 96
428	John Wengert.... ..	3 00	481	Hugh McClernon.....	5 00
429	Independence Mills Co .	259 33	482	A. Hathaway.....	3 33
430	Kenyon & Tabor .....	51 41	483	J. Sweet.....	4 05
431	P. O. Shea .....	11 75	484	C. R. Wallace.....	9 22
432	G. H. Robinson.....	25 43	485	Fisher Bro's.....	179 68
433	M. A. Benson .....	10 80	486	Bain & Stites.....	343 15
434	L. J. Whitney .....	10 30	487	Independence M'f'g Co .	10 80
435	Tabor & Son .....	4 00	488	G. W. Harner.....	17 10
436	— Fary .....	8 50	489	Palmer, Winall & Co ...	8 00
437	H. B. Mason & Co.....	6 00	490	A. Reynolds.....	79 80
438	T. S. Stone .....	10 35	491	J. C. Rich .....	42 55
439	C. E. Benson .....	11 79	492	Ensminger Bro's .....	20 22
440	Martin Dingsley.....	3 00	493	W. E. Kellogg .....	1 30
441	Field, Leiter & Co.....	94 26	494	Stuart & Douglas.....	5 75
442	W. F. Curtis .....	22 82	495	W. M. Young .....	16 94
443	American Express Co..	3 55	496	Wm. Toman.....	70 20
444	Pay-roll .....	1367 47	497	Shaver & Dows.....	5 76
445	L. B. Stevens.....	7 92	498	Wemott, Howard & Co .	8 48
446	J. Day.....	9 17	499	Bramhall, Deane & Co..	3 50
447	V. R. Beach .....	35 00	500	Gray Bros .....	21 74
448	J. A. Phillips.....	76 44	501	Eber & Walters .....	2 15
449	John McKenna.....	1 78	502	Crane Brothers M'f'g...	36 07
450	Henry W. King & Co...	15 51	503	J. E. Fisher .....	15 06
451	A. Fogel ..	30 00	504	W. M. Young .....	15 60
452	Field, Leiter & Co .....	6 00	505	Kenyon & Tabor .....	43 43
453	James Gray .....	4 50	506	Independence Mills Co .	261 87
454	C. E. Benson .....	12 80	507	W. G. Donnan .....	65 16
455	James Glenney.....	26 80	508	Harper, Reed & Co .....	38 49
456	W. A. Jones.....	35 50	509	W. T. Dale .....	21 90
457	James M. Houck .....	2 64	510	Thos. Barnett .....	5 70
458	John Manwell.....	1 91	511	Frank Megow.....	33 98
459	George Lowry.....	24 35	512	H. G. Brainard .....	26 65
460	George Carr.....	35 50	513	G. H. Robinson.....	25 60
461	Levi Burch .....	31 36	514	P. O'Shea .....	29 46
462	M. A. Benson. ....	23 97	515	Foster Brothers.....	54 60

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
516	Pay roll .....	\$1371 07	569	P. O. Shea.....	\$ 27 95
517	Jacob Hohl.....	230 17	570	Geo. Parks & Brothers .	18 50
518	A. Vogel.....	25 00	571	Hamilton & Amidon...	47 91
519	Margaret Shannon.....	6 12	572	Foster & Bros....	21 52
520	M. D. Ozias.....	6 50	573	G. H. Robinson .....	30 42
521	Field, Leiter & Co .....	87 33	574	Independence Mills Co.	254 78
522	Field, Lieter & Co.....	328 31	575	James Young .....	28 32
523	Oscar Burns.....	17 25	576	W. H. Chamberlin.....	6 50
524	C. A. Marsh .....	34 40	577	Frank Sroufe .....	2 88
525	G. W. Watkins .....	32 50	578	Fost & Sweet .....	12 90
526	F. W. Fawcett .....	41 00	579	Martin Dingsley.....	4 50
527	J. C. McGowan.....	9 60	580	Morris Tasker & Co....	8 85
528	C. E. Benson .....	9 48	581	R. R. Plane.....	5 40
529	L. B. Stevens.....	17 76	582	Pay-roll .....	1425 57
530	C. H. Stewart.....	5 30	583	David Borst.....	25 28
531	C. A. Marsh .....	72 72	584	Jacob Hohl.....	82 00
532	Thos. Netcott .....	4 70	585	David Borst.....	7 14
533	Samuel Hulett .....	9 30	586	J. C. McGowan.....	18 90
534	W. F. Curtis.....	32 10	587	A. M. Allen .....	18 00
535	L. J. Whitney .....	24 98	588	Jeremiah Boland.....	15 00
536	Harmon Luloff.....	21 15	589	Cora Kimball.....	15 00
537	A. Reynolds.....	22 75	590	Samuel Lucas .....	6 00
538	J. M. Houck.....	10 45	591	John Artis.....	8 10
539	A. B. Eaton.....	22 94	592	D. S. Deering.....	14 00
540	M. Mason .....	42 72	593	S. F. Searls.....	110 75
541	Mary A. Davis .....	8 00	594	Thomas Shannon.....	139 25
542	B., C. R. & N. R. R. Co.	278 95	595	T. F. Curtis .....	6 00
543	Illinois Central R. R. Co.	76 10	596	R. Raymond .....	2 50
544	Wm. Toman .....	8 50	597	— Klotzback .....	1 50
545	John Wiley .....	6 55	598	Mrs. L. S. Kinkade.....	22 50
546	Kenyon & Tabor .....	67 07	599	William Toman.....	11 00
547	Smale Bros.....	5 40	600	Illinois Central R. R. Co.	146 00
548	C. R. Wallace .....	16 10	601	American Express Co..	1 85
549	Z. Stout .....	28 25	602	B., C. R. & N. R. R. Co..	4 64
550	Stewart & Douglas.....	5 00	603	Thomas Shannon.....	54 00
551	S. Waggoner .....	5 57	604	A. Reynolds.....	59 50
552	Hitchcock & Walker ...	35 30	605	W. P. Large.....	23 04
553	John Mehlhop.....	176 64	606	P. O. Shea.....	20 53
554	Henry R. Worthington.	23 00	607	G. H. Robinson .....	20 35
555	H. A. Hurlbut & Co....	106 44	608	Martin Dingsley.....	7 50
556	Urbana Wine Co.....	41 50	609	James Young .....	21 34
557	John McGready .....	5 20	610	J. C. Rich .....	59 69
558	Bain & Stites.....	376 44	611	W. F. Curtis.....	11 59
559	W. P. Large.....	49 05	612	Samuel Hulett .....	8 78
560	Fisher Bros .....	302 64	613	— Houck. ....	18 66
561	Rebman & Henion .....	22 38	614	H. G. Clark.....	50 00
562	American Express Co..	2 80	615	Crane Bros. Man'fg Co.	34 62
563	G. W. Harner .....	12 78	616	Thomas Netcott.....	9 00
564	C. H. Losure .....	5 59	617	Fisher Bros .....	161 70
565	M. A. Benson .....	5 85	618	Henry W. King & Co...	126 00
566	J. S. Bouck.....	12 50	619	Conrad Reid.....	8 12
567	James Frame .....	17 20	620	G. W. Harner .....	9 60
568	Consolidation Coal Co..	29 75	621	Yeager & Co. ....	11 75

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
622	C. E. Benson.....	\$ 27 66	675	Field, Leiter & Co.....	\$ 4 68
623	A. B. Eaton .....	9 48	676	A. Reynolds.....	600 00
624	L. J. Whitney .....	12 67	677	G. H. Hill .....	300 00
625	Edward Playford.....	55 00	678	H. G. Brainard .....	166 67
626	H. A. Hurlbut & Co....	28 00	679	Mrs. L. M. Gray .....	166 67
627	Stuart & Douglas.....	10 00	680	Noyes Appelman.....	333 33
628	Wemott, Howard & Co.	14 15	681	A. Reynolds.....	81 50
629	J. Day.....	6 96	682	S. B. Olney .....	21 50
630	J. C. McGowan .....	8 97	683	Thomas Netcott.....	36 03
631	Roger McGill .....	14 99	684	Samuel Hulett.....	9 84
632	A. Hathaway.....	11 80	685	S. F. Searls .....	643 38
633	William Marshall.....	71 85	686	G. W. Harner.....	8 16
634	Post & Sweet.....	32 98	687	C. M. Burrett.....	3 36
635	C. R. Wallace.....	20 72	688	J. D. Russell.....	24 00
636	Kenyon & Tabor.....	39 73	689	Wm. Larabee .....	92 50
637	Ottoman Cahoe Co ....	89 50	690	L. A. Main .....	13 75
638	Bain & Stites.....	279 82	691	W. F. Curtis.....	37 02
639	Independence Mills Co..	239 15	692	L. B. Stevens .....	45 54
640	Consolidation Coal Co ..	104 55	693	James O'Brien.....	6 00
641	L. Thalheimer.....	4 50	694	Chas. Thomas, Sr .....	5 16
642	Pay roll .....	1391 31	695	J. C. McGowan .....	13 74
643	C. C. Caldwell .....	4 43	696	C. H. Losure.....	2 70
644	W. B. Rossell. ....	6 00	697	W. M. Young.....	19 92
645	John Gilmore .....	23 78	698	David Borst.....	7 27
646	American Express Co ..	1 90	699	Fanny Mason .....	28 58
647	William Toman .....	42 80	700	J. M. Houck.....	19 76
648	Mrs. L. S. Kinkade.....	25 50	701	A. B. Eaton .....	18 66
649	Bramhall, Deane & Co..	16 00	702	Conrad Reid.....	19 29
650	Palmer, Winall & Co....	42 50	703	John McGready .....	9 00
651	John Dorsett .....	4 50	704	Smale Brothers.....	6 50
652	A. L. Williston.....	11 25	705	John Wengert.....	12 00
653	Stuart & Douglas.....	9 00	706	Clark & Webber.....	14 45
654	Field, Leiter & Co .....	114 84	707	Thomas Barnett.....	8 85
655	Novelty Iron Works....	33 45	708	Roger McGill.....	17 43
656	John M. Fisher.....	18 00	709	Kenyon & Tabor.....	91 11
657	R. Krause .....	33 00	710	C. R. Wallace.....	39 00
658	Shaver & Dows.....	26 45	711	John Barnett.....	39 16
659	Wemott, Howard & Co.	13 40	712	W. P. Large .....	110 25
660	Crane Bros. Man'g Co ..	29 12	713	L. J. Whitney .....	18 36
661	August Meyers.....	5 20	714	A. B. Clarke.....	2 25
662	Union Oil Co.....	20 16	715	W. H. H. Morse .....	2 64
663	H. & H. C. Fullerton....	1 25	716	Independence Mills Co..	560 01
664	John Burke .....	11 30	717	Metropolitan W. M. Co .	117 60
665	John Gorman.....	32 00	718	Field, Leiter & Co.....	74 68
666	Urbana Wine Co.....	55 62	719	H. A. Hurlbut & Co ....	277 81
667	Ill. Cent. R. R. Co.....	639 43	720	J. T. Olmstead.....	17 95
668	Consolidation Coal Co ..	301 32	721	Bain & Stites .....	1077 37
669	B., C. R. & N. R. R. Co..	2 62	722	John Wiley.....	64 33
670	Naumberg K., L. & Co..	32 77	723	Post & Sweet.....	46 16
671	Henry W. King & Co ...	79 32	724	Z. Stout .....	117 35
672	Chas. J. Field.....	8 10	725	Henry Pfoetzer... ..	40 05
673	Field, Leiter & Co.....	406 06	726	Wm. Toman.....	48 30
674	Field, Leiter & Co.....	214 06	727	J. S. Bouck .....	65 84

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
728	Hugh McCleron .....	\$ 16 65	781	Anna E. Willard .....	\$ 2 40
729	R. R. Plane .....	16 70	782	M. A. Benson .....	4 20
730	A. Hathaway .....	16 55	783	Felix Shannon .....	10 00
731	J. C. Rich .....	190 97	784	John Borden .....	11 20
732	Frank Megon .....	211 52	785	E. C. Clark .....	105 15
733	John Whitfield & Son ..	161 00	786	T. W. Fawcett .....	43 60
734	E. B. Conable .....	1 75	787	J. M. Houck .....	16 98
735	E. H. Appelman .....	9 50	788	M. J. Hickey .....	8 30
736	Fisher Bros .....	158 08	789	James Beckley .....	10 25
737	Martin Dingsley .....	10 50	790	J. M. Kenney .....	6 75
738	James Young .....	83 40	791	Martin Dingsley .....	19 17
739	George W. Watkins .....	352 65	792	John Duffy .....	5 76
740	Wm. Toman .....	8 00	793	American Express Co. .	3 75
741	Tabor & Tabor .....	1 23	794	Joseph Stumph .....	20 25
742	M. Baker .....	13 10	795	S. B. Olney .....	24 50
743	C. F. Herrick .....	5 15	796	E. C. Clark .....	17 55
744	American Express Co. .	6 55	797	A. Brown .....	8 10
745	W. T. Dale .....	41 65	798	James O'Brien .....	6 20
746	Wemott, Howard & Co. .	7 30	799	Samuel Hulett .....	12 42
747	Wm. Crown .....	7 54	800	H. G. Brainerd .....	150 00
748	James Buckley .....	2 28	801	O. Marquette .....	29 55
749	L. J. Whitney .....	11 76	802	G. H. Hill .....	225 00
750	Independence M'f'g Co. .	3 75	803	Noyes Appelman .....	250 00
751	Ill. Cent. R. R. Co. ....	595 74	804	Mrs. L. M. Gray .....	125 00
752	L. M. Dodge .....	3 50	805	A. H. Hurlbut & Co. .	280 91
753	G. H. Robinson .....	98 44	806	George Hovey .....	75
754	P. O. Shea .....	106 71	807	J. W. Russell .....	38 00
755	O. Marquette .....	41 90	808	Novelty Iron Works ...	83 47
756	W. G. Donnan .....	50 27	809	Drees Bros .....	31 10
757	S. Waggoner .....	21 96	810	E. H. Kellogg .....	28 00
758	Consolidation Coal Co. .	390 55	811	O. F. Hodge .....	6 60
759	Pay roll for August .....	1536 93	812	C. F. Nefzger .....	20 00
760	Pay roll for September. .	1456 65	813	Union Oil Co. ....	30 32
761	L. Thalheimer .....	5 50	814	Ottoman, Cahoe & Co. .	41 00
762	Wm. Rowland .....	99 40	815	W. H. Chamberlin .....	93 25
763	A. B. Eaton .....	15 75	816	L. B. Walker .....	77 18
764	J. A. Fuller .....	20 75	817	A. S. Hixon .....	50 00
765	J. M. Robinson .....	8 25	818	Bonniwell & Dickson ..	17 80
766	Martin Dingsley .....	6 99	819	George Parks & Bro. ....	18 50
767	L. B. Stevens .....	24 15	820	H. W. Johns M'f'g Co. .	50 80
768	David Borst .....	52 35	821	M. Reitler .....	48 75
769	T. O. Neill .....	17 63	822	Shave & Dows .....	14 20
770	J. M. Kenney .....	12 97	823	J. Merrill .....	13 30
771	Martin Dingsley .....	4 00	824	R. S. Searls .....	178 18
772	Wm. Crown .....	20 85	825	— Foiney .....	6 50
773	J. M. Houck .....	9 45	826	Michael Cummings .....	20 00
774	American Express Co. .	3 60	827	— Wengert .....	10 00
775	James Gray .....	4 50	828	Owen Duffy .....	4 92
776	Samuel Hulett .....	7 21	829	J. A. Miller .....	26 40
777	Conrad Reid .....	8 13	830	W. A. Jones .....	935 57
778	J. F. Robinson .....	1 84	831	E. Leach .....	164 16
779	Wm. Hilton .....	9 00	832	A. Reynolds .....	500 00
780	C. H. Losure .....	9 00	833	Williams & Son .....	75
			834	Crane Bros. M'f'g Co. .	97 09



## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
835	Field, Leiter & Co.....	\$ 80 94	888	W. F. Curtis .....	\$ 93 82
836	L. B. Stevens.....	37 76	889	R. R. Plane .....	2 73
837	— Moson.....	28 44	890	John V. Farwell & Co.	314 83
838	Martin Dingsley.....	4 70	891	Palmer, Winall & Co...	15 00
839	L. J. Whitney .....	37 72	892	A. B. Clark .....	4 50
840	J. Day.....	6 63	893	C. F. Herrick .....	8 00
841	Conrad Reid.....	17 87	894	A. Hathaway .....	25 75
842	C. H. Losure... ..	1 75	895	W. G. Donnan .....	90 87
843	G. W. Harner.....	10 89	896	Ill. Cent. R. R. Co.....	2038 26
844	James Young.....	24 34	897	Consolidation Coal Co..	1053 43
845	J. F. Robinson .....	7 92	898	G. H. Robinson .....	154 76
846	Henry Cook .....	10 35	899	P. O. Shea .....	142 07
847	W. M. Young.....	66 20	900	W. E. Kellogg.....	7 50
848	J. S. Bouck .....	12 97	901	C. L. Thomas .....	8 00
849	Wm. Crown .. ..	27 36	902	Pay-roll for quarter...	4142 81
850	G. W. Watkins .....	13 82	903	M. A. Benson.....	9 18
851	R. Stewart.....	58 32	904	Edwin Grunsley.....	6 40
852	T. S. Stone.....	56 90	905	W. G. Kenyon .....	102 38
853	Roger McGill.....	25 97	906	M. A. Benson .....	10 88
854	A. B. Eaton.....	22 13	907	George Brooks.....	10 00
855	A. H. Frank.....	8 90	908	S. B. Olney.....	24 50
856	Hugh McClernon .....	7 00	909	M. A. Benson .. ..	5 40
857	Rock Island Glass Co..	6 60	910	M. A. Benson .....	4 40
858	William Marshall.....	105 38	911	S. B. Olney.....	24 50
859	John Wengert.....	5 25	912	James Hickey ....	6 00
860	Post & Sweet.....	333 29	913	Martin Dingsley.....	9 37
861	W. T. Dale. ....	37 15	914	Wm. Gale.....	6 00
862	Smabe Brothers.....	13 90	915	R. S. Searles ....	668 09
863	Hansen & Linehan....	3 83	916	N. B. Bryant.....	9 70
864	Urbana Wine Co. ....	92 25	917	Ebzy Wilson .....	128 59
865	S. Waggoner... ..	14 87	918	Edwards & Co.....	6 00
866	Wemott, Howard & Co.	55 50	919	George Goeller.....	2 70
867	C. R. Wallace.....	149 55	920	R. O'Brien.....	2 70
868	American Express Co..	4 15	921	J. W. Johnson .....	3 00
869	Bain & Stites.....	680 57	922	R. McGill.....	8 95
870	Fisher & Bros.....	981 28	923	Samuel Hulett.....	3 51
871	John Wiley.....	114 21	924	S. B. Olney.....	24 50
872	J. C. Rich.....	150 18	925	A. Reynolds .....	500 00
873	W. H. Chamberlin.....	16 50	926	G. H. Hill.....	225 00
874	Kellogg & Barrett .....	900 63	927	H. G. Brainerd.....	150 00
875	John Barrett .....	26 04	928	Mrs. L. M. Gray.....	125 00
876	Clark & Webber.....	11 00	929	Noyes Appelman.....	250 00
877	Independence Mills Co.	938 03	930	G. W. Watkins. ....	29 85
878	Kenvon & Tabor .....	124 18	931	Stuart & Douglas .....	8 00
879	A. Reynolds .....	149 02	932	Newton Bros.....	73 28
880	Wm. Toman, P. M.....	69 30	933	J. S. Bouck .....	30 00
881	John McGready.....	9 80	934	J. F. Robinson.....	6 43
882	John H. McKay.....	16 37	935	Jas. Young .....	58 60
883	Z. Stout.....	126 51	936	T. S. Stone.....	72 25
884	E. Zinn.....	3 12	937	M. Stuart .....	37 89
885	Foster Brothers.....	82 10	938	J. F. Robinson.....	21 42
886	W. P. Large .....	175 45	939	R. Stewart.....	106 83
887	B., C. R. & N. R. R. Co.	171 53	940	Wm. Crown.....	18 63

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
941	L. B. Stevens.....	\$ 5 20	995	M. Reitler.....	\$ 381 10
942	J. W. Russell.....	24 00	996	S. Waggoner.....	21 38
943	M. A. Benson.....	12 60	997	Smale Bro's.....	4 30
944	W. F. Curtis.....	35 13	998	John Wiley.....	14 39
945	A. B. Eaton.....	42 63	999	Henry R. Worthington.	23 00
946	Henry Cook.....	2 45	1000	John Barnett.....	14 53
947	Henry Cook.....	25 82	1001	R. R. Plane.....	12 52
948	Conrad Reid.....	8 59	1002	Novelty Iron Works...	2 44
949	Conrad Reid.....	34 16	1003	Henry W. King & Co...	14 35
950	John Williamson.....	2 72	1004	Kellogg & Barrett.....	255 87
951	Post & Sweet.....	34 83	1005	A. Vinton.....	20 87
952	W. E. Kellogg.....	10 00	1006	A. E. North.....	6 40
953	A. H. Blake.....	28 15	1007	Clark & Loveday.....	40 63
954	Independence M'f'g Co.	4 92	1008	B. & M. Coal & Land Co	50 78
955	W. H. Dale.....	10 50	1009	Crooked Creek Coal Co.	22 14
956	A. H. Frank.....	24 41	1010	Shaver & Dows.....	16 35
957	Z. Stout.....	47 83	1011	F. H. Armstrong & Co..	270 90
958	Hansen & Linehan....	6 35	1012	Kellogg & Barrett.....	175 28
959	Wait & Co.....	2 00	1013	Kellogg & Barrett.....	174 18
960	J. L. Mott Iron Works..	9 34	1014	Field, Leiter & Co.....	61 20
961	W. P. Large.....	87 80	1015	Field, Leiter & Co.....	8 00
962	Henry R. Worthington.	17 60	1016	Field, Leiter & Co.....	122 16
963	American Express Co..	8 70	1017	Field, Leiter & Co.....	603 60
964	C. H. Talmadge & Co...	37 50	1018	Field, Leiter & Co.....	31 00
965	C. R. & E. T. Smith.....	23 37	1019	Field, Leiter & Co.....	63 50
966	M. Stewart.....	4 32	1020	Field, Leiter & Co..	95 50
967	R. Stewart.....	19 78	1021	James Vick.....	27 22
968	W. M. Young.....	88 90	1022	Crane Bros M'f'g Co....	31 99
969	L. J. Whitney.....	16 78	1023	H. A. Hurlbut & Co....	268 50
970	G. H. Harner.....	13 07	1024	Wemott, Howard & Co.	6 80
971	Wm. Toman, P. M.....	42 60	1025	Consolidation Coal Co..	919 49
972	A. Hathaway.....	11 95	1026	W. E. Kellogg.....	12 40
973	Gregory & Beach.....	12 00	1027	A. Reynolds.....	96 28
974	C. R. Wallace.....	42 64	1028	Noyes Appelman.....	13 75
975	Bain & Stites.....	1459 10	1029	O. Marquette.....	83 05
976	Wm. Toman.....	77 75	1030	B., C. R. & N. R. R. Co..	138 18
977	John Wengert.....	17 75	1031	Ill. Cent. R. R. Co.....	1551 00
978	Clark & Webber.....	11 70	1032	Ill. Cent. R. R. Co.....	29 48
979	J. C. Rich.....	40 29	1033	Ill. Cent. R. R. Co.....	3 17
980	A. S. Barnes & Co.....	7 80	1034	W. S. Boggs.....	112 50
981	Bain & Stites.....	33 80	1035	W. G. Donnan.....	92 88
982	Tabor & Tabor.....	13 95	1036	Pay roll for filling ice h'se	54 87
983	John McGready.....	14 60	1037	Pay roll for quarter end- ing March 31.....	4213 55
984	Independence Mills Co.	474 40	1038	J. J. Travis.....	5 25
985	Kenyon & Tabor.....	91 91	1039	Jane Wilson.....	12 00
986	P. O. Shea.....	65 42	1040	J. F. McArthur.....	12 16
987	G. H. Robinson.....	77 86	1041	C. Stevens.....	40 32
988	Fisher Bros.....	134 78	1042	R. S. Searls.....	193 25
989	J. A. Fuller.....	1 25	1043	Edwards & Co.....	7 20
990	Hugh McClernon.....	13 95	1044	W. A. Jones.....	40 00
991	Brownwell & Dickson..	6 40	1045	W. A. Jones.....	36 00
992	Gregory & Beach.....	50 50	1046	Galvano Faraddic Mf'g Co.....	50 00
993	T. F. Curtis.....	17 50			
994	T. J. Marinius..	27 80			



## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1047	John McArthur .....	\$ 9 25	1100	S. T. Bryant .....	\$ 6 37
1048	Mrs. L. S. Kinkade.....	25 00	1101	Newton Bros.....	109 09
1049	T. W. Fawcett.....	42 00	1102	Henry Cook.....	6 22
1050	S. B. Olney .....	24 50	1103	R. Stewart.....	79 72
1051	J. F. McArthur.....	2 00	1104	Wm. Crown.....	6 57
1052	American Express Co..	8 95	1105	Crane Bros.....	40 28
1053	Henry Clark.....	100 00	1106	W. M. Young .....	69 10
1054	T. S. Stone.....	7 25	1107	D. H. Conningham.....	107 75
1055	Jesse Gray.....	5 00	1108	R. S. Searls.....	175 00
1056	S. B. Olney .....	24 50	1109	H. A. Hurlbut & Co....	148 78
1057	Wm. Gale .....	2 75	1110	Urbana Wine Co.....	57 60
1058	J. S. Bouck .....	3 69	1111	M. Reitler.....	18 45
1059	John T. McArthur.....	9 38	1112	Farley & Wolcott.....	26 21
1060	James Glenney.....	35 00	1113	Clark & Loveday.....	63 38
1061	Bain & Stites .....	12 60	1114	O. Marquette.....	60 48
1062	Edwards & Co.....	2 10	1115	Crane Bros. M'f'g Co. ..	51 33
1063	D. B. Bennett.....	32 45	1116	National Tube Works..	5 60
1064	Wm. A. Jones .....	33 00	1117	Stuart & Douglas .....	17 50
1065	John Lafferty .....	3 95	1118	Paul Ellings .....	16 17
1066	Mrs. L. S. Kinkade.....	25 00	1119	Hanson & Linehan.....	4 75
1067	T. S. Stone.....	5 09	1120	—— Herald.....	9 00
1068	Amanda M. Sheridan ..	6 00	1121	H. W. Johns M'f'g Co..	7 80
1069	W. M. Young.....	20 55	1122	A. L. Jones .....	99 00
1070	S. F. Searls .....	67 68	1123	James Foreman.....	3 40
1071	W. P. Large .....	52 63	1124	C. E. Benson .....	29 25
1072	W. P. Large .....	20 30	1125	W. T. Dale.....	25 60
1073	American Express Co..	2 00	1126	Hugh McClernon.....	22 85
1074	S. D. McLain .....	30 00	1127	Clark & Webber .....	13 85
1075	S. F. Searls .....	30 54	1128	John Wengert .....	24 25
1076	Thos. Shannon .....	110 96	1129	Fisher Bros.....	77 15
1077	S. Kline .....	7 07	1130	John Wiley .....	47 59
1078	Mathew Walameir.....	26 00	1121	Independence Mills Co.	806 06
1079	Geo. Josselyn, cons. ac't.	7 00	1132	C. R. Wallace .....	77 24
1080	Wm. A. Jones .....	26 50	1133	Post & Sweet .....	135 67
1081	S. B. Olney .....	24 50	1134	Smale Bros.....	81 20
1082	F. W. Loy .....	4 50	1135	R. R. Plane .....	91 94
1083	Sam. C. Hulett .....	16 57	1136	Kenyon & Tabor.....	65 39
1084	J. F. McArthur.....	7 87	1137	Times Co.....	7 70
1085	R. O'Brien.....	2 70	1138	A. Boyack .....	17 23
1086	E. A. North.....	3 80	1139	Samuel Hulett.....	8 99
1087	Henry R. Worthington.	23 00	1140	J. M. Houck .....	38 54
1088	Caswell Fire Dep. S. Co.	51 05	1141	G. W. Harner .....	37 52
1089	J. A. Fowler.....	7 00	1142	James Young.....	96 18
1090	Crane Bros. M'f'g Co...	36 17	1143	Wm. Toman, P. M.....	80 80
1091	Union Oil Co.....	25 94	1144	L. J. Whitney.....	40 83
1092	Paine, Ablett & Co....	146 16	1145	G. W. Watkins.....	15 04
1093	James Burns .....	8 00	1146	W. F. Curtis .....	128 86
1094	J. J. Boetcher.....	8 80	1147	A. B. Eaton.....	68 46
1095	E. M. Bissell.....	28 23	1148	G. W. Watkins.....	17 47
1096	C. D. Jones .....	15 00	1149	John Williamson .....	24 67
1097	Cedar Rapids G. L. Co.	30 66	1150	Conrad Reid .....	43 99
1098	Dimock, Gould & Co...	3 60	1151	—— Kelley.....	7 77
1099	J. A. Green.....	15 50	1152	Roger McGill .....	20 15

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1153	Tabor & Tabor.....	\$ 2 00	1206	Pay roll for quarter....	\$ 4429 94
1154	Bain & Stites .....	136 59	1207	George Sheridan.....	8 75
1155	Bain & Stites.....	57 25	1208	John F. McArthur.....	7 92
1156	H. A. Hurlbut & Co....	115 47	1209	Robert Krause.....	61 30
1157	Whait & Co.....	10 00	1210	Mrs. Ann Weart.....	3 54
1158	F. B. Bonniwell.....	3 50	1211	T. W. Fawcett.....	43 00
1159	Wemott, Howard & Co.	5 00	1212	Field, Leiter & Co.....	49 98
1160	Wemott, Howard & Co.	47 80	1213	John Corton.....	13 35
1161	Smith, Cook & Co.....	28 15	1214	P. French .....	26 32
1162	Smith, Cook & Co.....	19 14	1215	Daniel Smyser.....	30 96
1163	A. B. Clarke.....	27 25	1216	Wm. Bruce. ....	30 00
1164	R. Krause.....	109 02	1217	M. A. Benson.....	4 50
1165	J. W. Lamb.....	7 50	1218	American Express Co..	11 65
1166	Field, Leiter & Co.....	11 62	1219	Western Union Tel. Co.	1 14
1167	Field, Leiter & Co.....	16 30	1220	W. M. Young.....	141 60
1168	Field, Leiter & Co.....	427 16	1221	P. P. Hayes.....	4 94
1169	A. Reynolds. . . . .	107 65	1222	W. P. Large .....	55 51
1170	Noyes Appelman.....	13 24	1223	John Spece.....	7 00
1171	Mrs. Ann Weart.....	5 83	1224	W. P. Large & Co.....	40 85
1172	Bain & Stites.....	32 25	1225	E. I. Foster & Co.....	42 00
1173	Independence Mills Co.	67 05	1226	Martin Dingsley.....	4 25
1174	G. H. Hill.....	225 00	1227	Frederick Aldrich.....	4 00
1175	H. G. Brainard.....	150 00	1228	C. M. Burritt.....	3 43
1176	Mrs. L. M. Gray.....	125 00	1229	M. A. Benson.....	6 75
1177	A. Reynolds.....	500 00	1230	Mrs. Ann Weart.....	12 30
1178	Noyes Appelman.....	250 00	1231	James Gray.....	6 00
1179	S. Waggoner.....	9 95	1232	Field, Leiter & Co.....	16 92
1180	John Burnett & Co....	105 07	1233	Ann Ferney.....	6 05
1181	J. W. Russell .....	24 00	1234	Wm. Bailey.....	8 62
1182	P. Nicklaus.....	35 00	1235	J. T. Olmstead.....	6 65
1183	A. H. Fonda.....	2 95	1236	C. C. Cadwell.....	2 62
1184	R. O'Brien.....	7 50	1237	Mrs. Ann Weart.....	3 75
1185	A. L. Williston.....	11 00	1238	James Hickey .....	3 28
1186	Gregory & Beach.....	57 80	1239	S. B. Olney.....	24 50
1187	J. L. Mott Iron Works.	18 55	1240	Jesse Merrill.....	18 00
1188	J. M. Fisher.....	18 00	1241	S. L. Thomas.....	7 35
1189	W. P. Large .....	33 58	1242	H. A. Harmurn.....	24 22
1190	O. Marquette.....	11 20	1243	Robert Mount.....	4 12
1191	C. F. Herrick.....	11 40	1244	Wm. Bruce.....	35 00
1192	B., C. R. & N. R. R. Co.	40 63	1245	John Burkhead.....	5 42
1193	Ill. Cent. R. R. Co.....	174 47	1246	American Express Co..	2 55
1194	W. E. Kellogg.....	29 92	1247	M. A. Benson.....	24 65
1195	J. C. Rich & Co.....	83 15	1248	J. T. McArthur.....	8 00
1196	James Collins .....	283 50	1249	Griffin Bowker.....	6 00
1197	American Express Co..	7 20	1250	J. Robinson.....	1 68
1198	M. J. Baker.....	122 87	1251	Louis Schmidt.....	27 40
1199	Morris, Tasker & Co...	17 20	1252	S. T. Searls.....	106 65
1200	Mary A. Davis.....	5 10	1253	Peter Habermaner.....	1 35
1201	Wm. H. Rumpf... ..	995 25	1254	James Schrack.....	1 00
1202	Z. Stout.....	125 99	1255	E. I. Foster & Co.....	66 60
1203	W. G. Donnan.....	81 59	1256	Mrs. Ann Weart.....	4 55
1204	Geo. B. Vastine.....	10 00	1257	Mrs. Ann Ferney.....	8 50
1205	Ill. Cent. R. R. Co.....	31 50	1258	Martin Dingsley.....	5 25

## LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1259	T. W. Fawcett.....	\$ 41 00	1312	Palmer, Winall & Co....	\$ 16 00
1260	Jesse Gray .....	11 09	1313	Yeager & Co.....	5 20
1261	Wm. Bruce.....	9 67	1314	E. Zinn & Co.....	6 60
1262	G. W. Harner.....	21 69	1315	Gregory & Beach .....	41 03
1263	C. M. Burritt .....	7 52	1316	Wemott, Howard & Co.	20 40
1264	Maria Emmery .....	1 70	1317	John F. Hancock & Son	1059 55
1265	A. F. Bingham .....	116 68	1318	Bain & Stites .....	75 49
1266	Lafayette Young .....	65 65	1319	Smith & Stites .....	80 90
1267	W. P. Large & Co.....	20 30	1320	E. H. Kellogg .....	28 00
1268	Miss Ann Weart.....	4 65	1321	Wemott, Howard & Co.	10 95
1269	S. F. Searls .....	126 11	1322	O. Marquette.....	21 79
1270	Construction account..	75 00	1323	H. A. Hurlbut & Co....	135 14
1271	Wm. Bruce .....	40 00	1324	Kemmerer & Lamb....	16 85
1272	Peter McArthur .....	2 00	1325	Robert Krause .....	68 68
1273	C. E. Benson.....	2 96	1326	M. Walker & Sons.....	6 60
1274	A. F. Bingham.....	123 98	1327	Burlington Gas-light Co	74 88
1275	A. Reynolds .....	500 00	1328	H. A. Hurlbut & Co....	63 16
1276	G. H. Hill .....	225 00	1329	T. F. Curtis.....	3 00
1277	H. G. Brainerd .....	150 00	1330	J. W. Lamb.....	5 78
1278	Noyes Appelman.....	250 00	1331	J. Wackerbarth .....	62 90
1279	Mrs. L. M. Grey.....	125 00	1332	J. E. Whittlesey.....	73 70
1280	James Young .....	55 17	1333	Hickory Grove Coal Co.	24 60
1281	G. W. Harner.....	21 66	1334	Crane Bros. Man'f'g Co.	8 29
1282	Sampson George.....	3 76	1335	P. J. Karst.....	25 75
1283	John Williamson .....	7 15	1336	Fred Adee .....	26 44
1284	Mrs. M. J. Hickey .....	3 67	1337	J. L. Mott Iron Works..	15 65
1285	M. A. Benson.....	54 16	1338	Novelty Iron Works....	1 50
1286	Roger McGill .....	4 75	1339	C. C. Cadwell.....	75
1287	Mrs. A. B. Eaton .....	20 31	1340	W. M. Young .....	62 52
1288	James Hickey .....	11 66	1341	Crane Bros. Man'f'g Co.	22 78
1289	James Hickey .....	127 00	1342	Crane Bros. Man'f'g Co.	78 35
1290	Henry Cook.....	28 61	1343	Thomas Shannon .....	103 50
1291	L. J. Whitney .....	43 14	1344	Williams & Son.....	18 45
1292	J. W. Russell .....	2 00	1345	George Sauerbier .....	20 00
1293	Frank Megou .....	1 70	1346	Smith & Stites .....	74 79
1294	R. R. Plane & Co.....	6 51	1347	M. Reitler.....	341 00
1295	Fisher Bros.....	61 81	1348	Post & Sweet .....	247 43
1296	Kenyon & Tabor .....	80 81	1349	Post & Sweet .....	2 40
1297	Kenyon & Tabor .....	63 09	1350	E. B. Backus & Co .....	61 11
1298	Smale Bros .....	21 63	1351	R. R. Plane & Co.....	9 12
1299	W. M. Young.....	12 52	1352	John Wiley .....	25 04
1300	Smale Bros .....	92 37	1353	James Young.....	6 40
1301	J. Evers & Son.....	1 50	1354	G. W. Harner .....	9 22
1302	Palmer, Winall & Co....	19 25	1355	Samuel Hulett .....	14 06
1303	Ham & Carver .....	9 75	1356	Wm. Toman, P. M. ....	61 70
1304	Farley & Wolcott.....	12 57	1357	W. F. Curtis .....	77 32
1305	Stuart & Douglas.....	14 75	1358	Conrad Reid .....	55 50
1306	Henry R. Worthington.	50 20	1359	J. C. Rich.....	241 57
1307	Hanson & Linehan ....	71 25	1360	Geo. W. Watkins.....	71
1308	Clark & Loveday .....	17 25	1361	Samuel Hulett .....	2 55
1309	Chas. Larrabee .....	5 00	1362	Independence M'fg Co.	42 85
1310	John A. Phillips.....	8 17	1363	F. B. Bonniwell.....	116 96
1311	Henry W. King & Co..	7 75	1364	W. T. Dale .....	8 25

LIST OF VOUCHERS—CONTINUED.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1365	August Myers.....	\$ 30 00	1390	Peter McArthur .....	\$ 9 79
1366	S. Waggoner.....	18 72	1391	Clark & Loveday.....	44 00
1367	John Barnett.....	10 50	1392	B., C. R. & N. R. R. Co..	682 35
1368	W. E. Kellogg .....	40 79	1393	J. W. Russell .....	10 50
1369	C. R. Wallace.....	53 58	1394	E. Miller .....	2 00
1370	A. H. Frank.. .....	1 65	1395	John T. Hancock & Sons	92 66
1371	Independence Mills Co.	819 74	1396	Clark & Loveday.....	13 25
1372	A. Hathaway.....	2 80	1397	W. P. Large & Co.....	241 53
1373	A. Hathaway .....	19 66	1398	Field, Leiter & Co.....	109 72
1374	A. B. Eaton.....	13 19	1399	Field, Leiter & Co.....	18 33
1375	H. McLernan.....	31 70	1400	Field, Leiter & Co.....	236 37
1376	Shaver & Dows.....	6 17	1401	Field, Leiter & Co.....	4 34
1377	— Lobdell .....	1 50	1402	Ill. Cent. R. R. Co. ....	142 16
1378	Clark & Webber.....	13 30	1403	Kenyon & Tabor.....	24 10
1379	M. J. Baker.....	496 61	1404	John Wengert .....	22 25
1380	A. B. Clarke .....	9 43	1405	G. H. Robinson .....	30 55
1381	A. H. Fonda .....	5 05	1406	E. I. Foster & Co.....	117 60
1382	Smith & Stites.....	5 00	1407	P. O. Shea.....	16 80
1383	Whait & Co.....	3 80	1408	American Express Co..	3 55
1384	Wm. Marshall .....	1106 98	1409	Rock Island Glass Co...	10 58
1385	A. Reynolds ....	183 73	1410	Winnegar & Manning..	2 50
1386	M. Reitter .....	73 35	1411	B., C. R. & N. R. R. Co..	31 50
1387	Wm. Toman.....	22 75	1412	W. G. Donnan.....	80 12
1388	Z. Stout .....	97 27	1413	Field, Leiter & Co.....	118 86
1389	Mrs. M. J. Hickey .....	1 32	1414	Pay roll.....	4513 12
				Total .....	\$ 129,771 53

LIST OF VOUCHERS DRAWN ON CONTINGENT.

Number.	NAME.	Amount.	Number.	NAME.	Amount.
1	July pay roll.....	\$ 51 92	4	F. A. Gregory .....	\$ 200 00
2	Brick for repairing flues.	70 00	5	J. A. Phillips.....	395 00
3	Jerry Boland .....	96 00		Total .....	\$ 812 92

# TREASURER'S REPORT.

TREASURER'S OFFICE, }  
INDEPENDENCE, IOWA, Sept. 30, 1879. }

*To the Board of Trustees of the Iowa Hospital for the Insane at Independence:*

## CURRENT EXPENSE FUND FROM OCT. 1, 1877, TO OCT. 1, 1878.

Balance on hand Oct. 1, 1877.....	\$ 2,575.92	
Receipts to Oct. 1, 1878—From State Treasurer.....	48,500.00	
From Steward.....	1,237.37	
From interest on State.....		
Warrants, less exchange.....	54.80	
	<u>          </u>	\$52,368.09
By payment to Oct. 1, 1878.....		45,972.48
		<u>          </u>
Balance on hand Oct. 1, 1878.....		\$6,395.61

## CURRENT EXPENSE FUND FROM OCT. 1, 1878, TO OCT. 1, 1879.

Balance on hand Oct. 1, 1878.....	\$ 6,395.61	
Receipts to Oct. 1, 1879—From State Treasurer.....	70,664.01	
From Steward.....	2,879.03	
From interest on warrants....	125.28	
	<u>          </u>	\$80,063.93
By payment to Oct 1, 1879.....		66,556.63
		<u>          </u>
Balance on hand Oct. 1, 1879.....		\$13,507.30

## CONTINGENT EXPENSE FUND FROM OCT. 1, 1877, TO OCT. 1, 1879.

Balance on hand Oct. 1, 1877.....	\$	
Received from State Treasurer Oct. 22, 1878.....	417.92	
Received from State Treasurer July 15, 1879.....	395.00	
	<u>          </u>	\$812.92
By payment Dec. 2, 1878.....	\$417.92	
By payment July 19, 1879.....	395.00	
	<u>          </u>	812.92
		<u>          </u>
Balance on hand Oct. 1, 1879.....		

Respectfully submitted,

W. G. DONNAN,  
*Treasurer.*



**REPORT**  
**OF THE**  
**JOINT COMMITTEE**  
**OF THE**  
**EIGHTEENTH GENERAL ASSEMBLY**  
**OF THE**  
**STATE OF IOWA,**  
**APPOINTED TO VISIT THE**  
**HOSPITAL FOR THE INSANE**  
**LOCATED AT**  
**INDEPENDENCE.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**





## REPORT.

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TO THE EIGHTEENTH GENERAL ASSEMBLY:

YOUR Joint Committee appointed to visit the Hospital for the Insane at Independence, have discharged that duty, and submit the following report:

We find the buildings which are completed, together with the out-buildings, in good condition, and properly cared for; and the uncompleted portion properly protected.

We find the kitchen, laundry, sewing-room, store-room, etc., etc., in as good condition as could be expected for the time in use, and that the same are kept clean and well protected.

We visited all parts of the building and found the wards, where patients are kept, in as good condition as they can be kept in their present overcrowded state.

Good order prevailed in all places, and many of the patients seemed heartily to enjoy the entertainments provided, and preserved a remarkable degree of interest and good feeling at such entertainments.

There can be no doubt but what it has become almost an absolute necessity that the portion of the hospital now enclosed, but not completed, should be at once completed. The crowded condition of the wards, and a proper separation of the sexes, demand action by the State at the present session of the legislature.

Whether a still further enlargement should be made, to make the building conform to the original plans, we leave to the wisdom of the General Assembly. But we are of the opinion that unless sections five and six are provided for by an appropriation at this time, there will be no adequate means of taking care of the rapidly increasing number of patients before any future action can be had by the State, and that, at least, an appropriation should be made to enclose, if not complete the same.

The amount necessary to complete the enclosed sections, three and four, is \$27,000, including the furnishing of the same. The amount to enclose sections five and six, is \$38,000.

The amount to enclose and complete sections five and six, is \$60,000.

Sections three and four cannot be properly completed unless sections five and six are at least enclosed.

We recommend an appropriation of \$27,000 to complete and furnish sections three and four, and \$38,000 more to enclose sections five and six.

We believe it would be economy not only to complete sections three and four, but also sections five and six, which would then complete the entire building according to the original plan.

Also, the sum of \$3,000 to be a contingent fund for the replacing of any one, or all, of the boilers, in case the same should require to be replaced prior to the next meeting of the General Assembly, and to be used in the repair of such boilers in case they should not require to be replaced.

The boilers are old and patched, and it is not safe to leave them without a contingent fund to provide for any accident, which might occur, which would temporarily destroy the power to heat or protect this valuable property to the State.

Also, the sum of \$1,000 to be used in attempting to secure an artesian well already commenced.

Also, \$1,800 for an extension of the sewer about 1,500 feet, to a point where the inmates would be protected from the noxious gases which now at times tend greatly to the destruction of the health of all who are compelled to live in the buildings.

Also that the \$500 appropriated at the last session of the General Assembly for a road, be placed in the hands of the Trustees, to be used upon a more commodious road than the one provided in the act referred to.

Also a sufficient sum, say \$1,500 be appropriated for the construction of two cisterns to secure the water falling from the roof of the building, and also to plaster the rooms in the basement where the ceiling is exposed to the steam pipes, say \$500.

Also that the sum of \$800 be appropriated for the purchase of a clothes wringer and mangle.

Also that the allowance per capita, per month, be reduced from \$16 to \$14.

Also a small contingent fund of about \$1,000 for the repairs and such other necessary expenses as cannot well be enumerated in a general appropriation.

In reply to the interrogatories of the Joint Resolution under which your committee was appointed:

1. Whether the appropriations made by the last General Assembly have been wisely and economically expended?

Your committee so far as they are able to judge, believe that the appropriations have been wisely and economically expended.

2. Whether they have been expended for the objects appropriated?

We believe that the appropriations have been expended for the objects appropriated.

3. Whether chapter 67 of the acts of the Seventeenth General Assembly has been complied with in not contracting indebtedness in excess of the appropriations?

From the best information at our command, we believe that chapter 67 of the acts of the Seventeenth General Assembly, has been fully complied with.

4. Whether there has been any diversion of any money from the specific purpose for which it was drawn out of the State treasury?

Your committee find that \$1,200 of the current expense fund has been expended for the purpose of repairing three defective boilers, which was, in the judgment of your committee, absolutely necessary to be done. Except as above stated, your committee believe that no diversion of any money from the specific purpose for which it was drawn out of the State treasury has been made.

5. Said committees shall also report the names and number of persons employed by the several institutions, for what purpose employed, and at what salary; also whether any of the employed receives or has received anything in addition to the salary, in the way of board, rooms, lights, fuel or clothing, or anything else at the expense of the State.

Your committee find eighty-four employes in the institution; names of persons employed therein, occupation, and pay as follows, with board, rooms, lights and fuel, and nothing else, at the expense of the State:

## LIST OF EMPLOYES, OCCUPATION, ETC.

Number.	NAMES.	OFFICE.	Salary.	TIME.
1	A. Reynolds .....	Superintendent .....	\$ 2000	Per ann'm.
2	G. H. Hill .....	Assistant physician....	900	Per ann'm.
3	H. G. Brainerd .....	Assistant physician....	600	Per ann'm.
4	Noyes Appelman .....	Steward .....	800	Per ann'm.
5	Mrs. L. M. Gray .....	Matron .....	500	Per ann'm.
6	A. D. Gurnsey .....	Engineer .....	60	Per month.
7	Peter Walters .....	Fireman .....	30	Per month.
8	Roger McGill .....	Fireman .....	30	Per month.
9	John Dorsett .....	Butcher .....	37	Per month.
10	C. L. Thomas .....	Gardener .....	33	Per month.
11	Lars Hansen .....	Barnman .....	26	Per month.
12	James Hickey .....	Hack-driver .....	26	Per month.
13	Chas. Thomas .....	Night watch .....	37	Per month.
14	H. A. Cramer .....	Carpenter .....	40	Per month.
15	Alias Peck .....	Teamster .....	18	Per month.
16	J. A. Weart .....	Teamster .....	18	Per month.
17	George Breidenbach .....	Baker .....	45	Per month.
18	Joseph Landis .....	Assistant baker .....	16	Per month.
19	James Nectcott .....	Carman .....	26	Per month.
20	John Thomas .....	Kitchen .....	12	Per month.
21	Martha Miller .....	Kitchen .....	8	Per month.
22	Mary Oatman .....	Kitchen .....	8	Per month.
23	Victoria Wendling .....	Kitchen .....	9	Per month.
24	Maggie Tranfler .....	Kitchen .....	9	Per month.
25	Hattie Tranfler .....	Kitchen .....	9	Per month.
26	Minerva Newcomer .....	Cook .....	16	Per month.
27	Rebecca McCarty .....	Cook .....	14	Per month.
28	Bell Alquist .....	Seamstress .....	14	Per month.
29	A. M. Wackerbarth .....	Seamstress .....	17	Per month.
30	Jane Thomas .....	Washer .....	14	Per month.
31	Mary Wendling .....	Washer .....	11	Per month.
32	Sophia Walters .....	Washer .....	11	Per month.
33	Sarah Thomas .....	Ironer .....	14	Per month.
34	Mary O'Connor .....	Ironer .....	11	Per month.
35	Katie McManiman .....	Ironer .....	11	Per month.
36	Maggie O'Connor .....	Ironer .....	11	Per month.
37	Rosy Galentin .....	Office girl .....	10	Per month.
38	Mary Galligan .....	Dining-room .....	10	Per month.
39	Katie Hussey .....	Dining-room .....	8	Per month.
40	Della Craton .....	Dining-room .....	9	Per month.
41	Josie Smith .....	Chambermaid .....	10	Per month.
42	D. H. Feister .....	Supervisor .....	30	Per month.
43	Conrad Mathis .....	Attendant .....	24	Per month.
44	J. W. Galentin .....	Attendant .....	22	Per month.
45	Fred Kimball .....	Attendant .....	24	Per month.
46	T. C. McKenzie .....	Attendant .....	22	Per month.
47	F. S. Rosencrans .....	Attendant .....	22	Per month.
48	G. O. Miller .....	Attendant .....	22	Per month.
49	P. J. Galligan .....	Attendant .....	22	Per month.
50	W. J. Martin .....	Attendant .....	24	Per month.

## LIST OF EMPLOYES, OCCUPATION, ETC.—CONTINUED.

Number.	NAMES.	OCCUPATION.	Salary.	TIME.
51	Graham Slack .....	Attendant .....	\$ 21	Per month.
52	P. C. S. Weart .....	Attendant .....	18	Per month.
53	Charles Munnings .....	Attendant .....	20	Per month.
54	R. O. Woodward .....	Attendant .....	19	Per month.
55	William Innis .....	Attenpant .....	19	Per month.
56	W. W. Fister .....	Attendant .....	22	Per month.
57	Fred Tiellevain .....	Attendant .....	21	Per month.
58	V. W. Peck .....	Attendant .....	18	Per month.
59	E. S. Price .....	Attendant .....	20	Per month.
60	Mary Sisson .....	Supervisor .....	25	Per month.
61	A. M. Allen .....	Night watch .....	18	Per month.
62	Alice Burroughs .....	Night watch .....	18	Per month.
63	Fannie Price .....	Attendant .....	16	Per month.
64	Sarah J. Ellis .....	Attendant .....	16	Per month.
65	Mary Boyack .....	Attendant .....	16	Per month.
66	Sarah Bouck .....	Attendant .....	18	Per month.
67	Clara Coleman .....	Attendant .....	18	Per month.
68	Alice O'Connor .....	Attendant .....	16	Per month.
69	Julia Davies .....	Attendant .....	16	Per month.
70	Katie Klotzback .....	Attendant .....	16	Per month.
71	Edith Sener .....	Attendant .....	16	Per month.
72	Frankie Fisher .....	Attendant .....	18	Per month.
73	Orlinda Feathers .....	Attendant .....	15	Per month.
74	Marcella Roth .....	Attendant .....	15	Per month.
75	Jesse Boyack .....	Attendant .....	15	Per month.
76	E. H. Thomas .....	Atteudant .....	14	Per month.
77	Mary Nicholson .....	Attendant .....	16	Per month.
78	Anna Stumma .....	Attendant .....	14	Per month.
79	Alice Green .....	Attendant .....	14	Per month.
80	Mary E. Wood .....	Attendant .....	13	Per month.
81	Fannie Healey .....	Attendant .....	13	Per month.
82	Cora Kimball .....	Attendant .....	16	Per month.
83	Anna Stites .....	Attendant .....	13	Per month.
84	Otto Wonnemberg .....	Apothecary .....	33½	Per month.

Your committee are of the opinion that this institution is in good and competent hands, well managed and prosperous.

All of which is respectfully submitted.

MARTIN GARBER,

*On the part of the Senate.*

ELVIN TILTON,

J. F. DUNCOMBE,

*On the part of the House.*



THIRD REPORT  
OF THE  
VISITING COMMITTEE

TO VISIT THE  
HOSPITALS FOR THE INSANE.

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1879.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





## REPORT.

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HON. JOHN H. GEAR, *Governor of Iowa*:

THE State Visiting Committee to the Hospitals for the Insane, beg leave to submit this their third biennial report:—

Your Committee, by one or more of its members, has made regular monthly visits to the Asylums as required by law. At these visits a thorough inspection has been made of the institutions as to the condition of the various wards, as to cleanliness, sufficiency of bedding, quantity and quality of food, care that patients receive from attendants, etc., etc.; and it affords us pleasure to report that, in all these essentials to the comfort of hospital life, no complaint can be made. At these visits care is taken to give attention to the various complaints of patients, but none were found that required any special investigation. It is often a difficult matter for even experts to decide upon the dividing line between sanity and insanity, and it is often equally difficult to decide whether a patient should remain in the hospital or be returned to his home and family. Complaint is frequently made by patients that they are unnecessarily detained, and to a casual observer many of these complaints would seem to be well founded; but in all such cases your committee have deemed it best to defer largely to the opinions of those who were in daily contact with the patients, and as there can be no possible inducement on the part of the hospital authorities to detain any one fit to be removed, we have never thought it necessary to interfere in that direction.

The hospitals are not so crowded as at the date of our last report. While the number of patients is gradually increasing at the Independence asylum, yet the completion of new wards has prevented the asylum from becoming overcrowded. At the Mt. Pleasant asylum, relief was sought under the following section of the Code:

SEC. 1425. The Board of Trustees shall order the discharge or removal from the hospital of incurable and harmless patients, whenever it is necessary to make room for recent cases. \* \*

In accordance with this section the board of trustees of the Mt. Pleasant asylum, at its meeting in June, 1878, ordered the return to the counties of a considerable number of the class named; and their removal relieved the overcrowded condition of the hospital for the time being. But the asylum is again filling up, and contained, in October, four hundred and eighty patients; and the time is not far distant when it will be as much over-crowded as ever, unless some plan is devised for relief.

Much complaint was made by many of the counties which were thus required to care for their own insane. In order to ascertain the general feeling on this subject, and also as to the facilities of the counties for properly caring for this class of persons, your committee addressed a circular to the county auditor of each county in the state propounding the following questions:

1st. How many insane are cared for in your county by your county authorities?

2d. Have any of them formerly been inmates of either of the State asylums?

3d. What is the condition of such patients, harmless or otherwise?

4th. Are your arrangements such that they can have proper care and attention?

5th. Would your authorities return them to the asylum if proper room was prepared for them, or would they prefer keeping them at your own institution?

6th. What is the cost per head per week for taking care of them, as near as you can ascertain?

Answers were received from eighty-five counties; of these, forty-nine counties report three hundred and thirty-five patients kept within the counties; thirty-six counties report no patients kept within the counties, and no accommodations for keeping any. Nearly all kept by counties have formerly been inmates of one of the State asylums. Most of them are termed harmless, though a few are reported violent at times.

But three or four counties report suitable arrangements for caring for them. Most of them are kept at county poor-houses. Twenty-four counties report that they prefer keeping them within their own counties; twenty-five report in favor of returning to the asylum. The highest cost is reported at \$7 per week, and the lowest at sixty-six cents,

the average being \$2.50. The counties reporting in favor of keeping them in their own counties, do so on the ground of saving expense.

From the character of the reports, your committee conclude that the facilities for keeping insane patients, outside of the hospitals, are very inadequate for their proper accommodation. Many, who are ordinarily quiet and harmless, are subject to become suddenly violent and destructive for a time. Our opinion, therefore, after mature deliberation, and viewing the question in all its various lights, is that it is the duty of the State, and for the best interest of all, that a building be at once erected for the accommodation of that class of insane of which we have been speaking; a building to which those kept in counties where the accommodations are inadequate, can be removed; and to which those kept in asylums when they reach an incurable stage, and are comparatively harmless, can be sent. While the question of the cost of keeping the insane is one of importance to the tax-payers of the State, yet it should by no means be the controlling one. Humanity requires that this unfortunate class should have all the care and attention requisite to render them as comfortable as such unfortunate creatures can be made.

We are of the opinion that such patients can be maintained as cheaply at a properly constructed State institution as they can by the counties in their isolated capacity. It is but reasonable to suppose that many of the counties reporting their patients taken care of for so small a sum as sixty-six cents to one dollar per week, draw their support largely from a farm connected with the institution, and have reported only the cash outlay. This is at least the charitable view of the case, as it is evident to all that one dollar per week would be a very inadequate allowance for care, board, etc., of patients, if that sum covered all expenses.

As to the kind of building to be erected, and where located, your committee can only suggest that a few necessary essentials should be observed. In the first place, the building should be a good substantial, one, erected for comfort and convenience, and not for *show*. It may be well to erect a few of our public buildings with a fine exterior, that adds nothing to the durability or utility of the building, in order that we may keep up a reputation for taste and enterprise; but we are of the opinion that for most of our public buildings the people would be better satisfied if less money were expended for that purpose.

In locating a building for the purpose named, the first object should be to secure a tract of good land, of at least 320 acres, situated some-

where central in the state, and easy of access from all parts of the state by rail, convenient to fuel and building material. The State pays too much for transporting these articles to our State institutions. A never-failing supply of pure water is of prime necessity. Too little attention has been paid to this important matter heretofore. Building material, fuel, and other supplies can be transported, the only objection being the cost; but provision must be made on the ground for a supply of that necessary article.

As to the cost of a building, purchase of a site, etc., we have made no estimate, as much, of course, would depend on its extent. It would not be necessary to erect at once a building of sufficient capacity to accommodate all of the class of persons for whom it would be intended, as many counties would no doubt keep for a time those they have, but the building should be so constructed that additions could be made from time to time, as necessity required. Perhaps \$100,000 would be sufficient for the first appropriation, conditioned that it should be so expended as to be available, and not in laying the foundation for a vast structure requiring the expenditure of several more thousands before it could be utilized.

The practice of removing the criminals who become insane from our penitentiaries, to the asylums, has been treated of in our former reports, and we have nothing new to add on that subject.

DR. S. B. OLNEY,  
T. W. FAWCETT,  
MRS. L. S. KINKADE,  
*Committee.*





TWELFTH BIENNIAL REPORT  
OF THE  
BOARD OF CURATORS  
OF THE  
STATE HISTORICAL SOCIETY  
AT IOWA CITY,  
TO THE  
GOVERNOR OF THE STATE.

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1879.

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*[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]*

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





## REPORT.

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HALL OF THE STATE HISTORICAL SOCIETY, }  
IOWA CITY, IOWA, December, 1879. }

*To His Excellency, JOHN H. GEAR, Governor of Iowa:*

THE Board of Curators of the State Historical Society herewith present the biennial report required by law.

The society is now in the twenty-third year of its existence, being about six months older than the present constitution of Iowa, and but little more than ten years younger than the State itself. It may fairly be reckoned one of the advantages enjoyed by the younger members of our union of States over the older ones, that they have reached full maturity within the lifetime of their earliest settlers, and are thus enabled to hand down to their future generations of inhabitants a full and perfect record of state history from the first settlement. The student of their history has not to grope through a century or two of slow and unrecorded growth, to find the causes which have made them what they are, and stamped a distinctive character upon their institutions and their men. The foundation of a State Historical Society by the same generation that founded the State itself, is a phenomenon that probably was never seen before the present century, and that could hardly have occurred under other circumstances than those which have attended the birth of Iowa and her sister States in the Mississippi valley. Usually the first colonists of a new land have neither the leisure which permits them, nor the tastes which persuade them, to record carefully the earliest annals of their enterprise. Usually, too, they are hardly aware of the importance and value of such annals in the eyes of posterity. They can hardly know whether the com-

monplace toils and labors, which are all they have to record, will figure in history as the opening page of a grand tale of a thousand years, or whether they will drift into the Sargossa sea of oblivion, with the valueless and unconsidered relics of so many other abortive human enterprises. We need not wonder, therefore, that two entire centuries passed over the colonies which became our elder sister states before any organized effort was successfully made to preserve their early history; but we may be profoundly grateful that a few unselfish and far-sighted men accomplished as much for Iowa, within as many decades from the date of its first territorial organization. It is worth mentioning here, in this connection, as a circumstance which can be paralleled in but one or two other states, if at all, that among the present most active members of our Board, meeting with us every month for the work of our Society, we have the sheriff by whom this county was first organized upon its purchase from the Indians (Col. Samuel C. Trowbridge), and at least one of the first purchasers of land in Iowa City (Robert Hutchison, Esq.), who saw the site of our beautiful university town an uninhabited waste, and heard the voice of the general government (through the mouth of an auctioneer) offering it for sale to the first comers. Such facts as these will no doubt be common enough in the still younger states and territories west of us, where historical societies, after the example of our own, now are formed, or will be so, as soon, almost, as there is a single fact in their history to remember; but upon the minds of older communities they impress more forcibly than dates and statistics, the completeness as well as the rapidity with which a State, still so young as Iowa, has developed her institutions. To many an intelligent resident of the old world, the changes which these gentlemen have seen with their own eyes, and the lessons which they can draw from their own memories, would no doubt seem as foreign to sober history as the creations of romance.

But the advantage which Iowa may derive from the ease and accuracy with which her earliest history may be written, lies not chiefly in the record of her wonderful material growth. The story of the earliest formative period of a great state is more fruitful in lessons than any later one. The elements of national life, the deep-seated causes of weal or woe to the entire community, the true

nature of popular institutions and their actual working, are more easily studied in that stage than in any later one. The same forces are at work, guided by the same laws—speaking generally, and apart from minor qualifications,—in the imperial state with millions of population, as in the sparsely settled territory from which it has grown; but the very extent of the former makes it more difficult to see these forces and laws in their entirety, and therefore their true relations to each other. The threads which must guide us through the labyrinth may be much more easily grasped while they are few and simple. Besides, the mere lapse of time makes more difficult the solution of every historical problem. It may be taken as an axiom, that the institutions and the events of a given community, in any given generation of its members, are the exact net results of the history of all the preceding generations of the same community. We could explain them—we could almost predict them beforehand,—if we did but know that history perfectly. With even a tolerable knowledge of that history, they could be sufficiently understood to save each succeeding generation from a multitude of blunders, losses, and disasters. The chief obstacle to such knowledge is the fact that the problem increases in complexity with each succeeding generation. The first period in the life of a new state may be analyzed and comprehended with comparative ease; the second is complicated with all the results of the first; the third may already become so complex as to defy investigation historically and compel the student of government and law, of social science or political economy, to abandon his method in despair, and fall back upon the commonplaces that have so long served as assumed “principles” in these sciences. Hence, it is an advantage—not a sentimental, imaginary pleasure, but a solid, practical, useful advantage—for any enlightened community, in the nineteenth century, to be able to study its history from the beginning in full, accurate, trustworthy records. The history of Iowa may be so written, as to give the world, what it does not now possess, a complete contemporary record of the normal, untrammelled development of a free and sovereign State, under republican forms of government, from its very beginning. The very reasons which make that history seem uneventful and dull to the mere curiosity hunter, give it a special value as a contribution to social and politi-

cal science. And it may certainly be added, without betraying a more than just state pride, that no community upon the face of the earth has a history better worth recording in these respects, than the young State of Iowa. Brief as that history has been, it is already that of a great state, larger, richer, more populous than many of the kingdoms and republics most famous in story and song; and yet its material and financial prosperity has not been purchased, as has too often been the case elsewhere, by neglect of the intellectual and moral advancement of its citizens. The pastor and the teacher have kept equal pace with the workman and the farmer. Freedom and law have gone hand in hand. When war became just and necessary, fifty regiments sprang from the midst of the most peaceful and industrious people on the continent, as the men of Clan Alpine sprang from the heather; and when war was no longer a duty, they returned to civil life, to be governed by the justice and the constable. There is probably no state in the Union, of any size, so free from "the criminal classes"—from definite and traditional bodies of law-defying men or women, gathered and compacted together by pauperism, ignorance, and evil training—as are the million and a half of the people of Iowa. There is probably no community upon earth, where the average of wealth *per capita* is so high as it is in Iowa, in which the entire amount of wealth is so evenly distributed.

Is not the experience of such a State as this worth preserving from the very beginning? And ought not special pains to be taken to preserve it *now*, when the men who founded it are still here, in considerable numbers, but thinned out every year by the resistless scythe of Time?

The Society has already, in the past twenty-three years, saved up in its annals, and archives, much that would before this time have been lost forever, but for its exertions. It holds now, in its cheap and temporary quarters, a mass of material for state history that all the wealth of the State could not replace if once destroyed. But there is work for it to do, which must be done very soon or never, of greater extent and value than all it has yet done. The sum at present allowed for its work by the State enables it barely to store and preserve its present collections. It could not even do this, but for the gratuitous services of a few of its members, who

give their time and labor, and in some cases their money, to a task in which they have not the slightest interest beyond that of all their fellow-citizens.

The organization and work of the Historical Society have been fully detailed in its successive biennial reports, of which this is the twelfth. The first three of these, for 1857, 1859, and 1861, respectively, are now entirely out of print, and inaccessible to most of the persons interested in the work of the Society. They contain matter of some importance for preservation, and are not lengthy. They embrace in all, title-pages included, only twenty-six pages, which could be easily reprinted in twenty pages, at most, of the form now used for executive documents. The curators would therefore respectfully suggest that these three reports should be reprinted, as an appendix to the present (twelfth) report of the State Historical Society. Even if there were no other reasons for doing so, it would be a graceful recognition of the services rendered to the State by the gentlemen who first founded the Society, and gave much unselfish labor to the work. Some of them are no longer among us to be affected by any praise we can bestow. Others are still honored citizens, and retain a strong interest in the history of which they themselves have been a great part.

During the two years which have elapsed since the eleventh report, the work of the Society has necessarily been confined to the care of its collections, with such additions as have been made to it by voluntary contributions. All that could be saved from the state allowance of \$500 per annum, after paying the most indispensable expenses of rent, fuel, and care, has been used in binding the newspapers which contain the early history of the State. An account of these disbursements will be found in the treasurer's report annexed. It is much to be regretted that the Society has not had the means to complete this work, and to preserve, in permanent, well-bound volumes, all its collections of Iowa papers. We can hardly complain that our list of current publications is not more complete, while we have not the means to bind regularly the papers that are sent to us gratuitously by the publishers. But we are all the more obliged to those who do not allow their generosity to be chilled by this seeming want of appreciation, and append with pleasure the following list of Iowa newspapers now regularly re-

ceived at the Historical rooms, by the gift of the publishers; for the binding of which the State should make provision:

List of newspapers regularly received at library of Historical Society:

Des Moines Register.	Muscatine Weekly Journal.
Iowa City Republican.	Iowa City State Press.
Cedar Falls Gazette.	Cedar Rapids Times.
Fayette County Union.	Marengo Republican.
Clayton County Journal.	Dubuque Weekly Times.
Lyons Weekly Mirror.	Anamosa Eureka.
Adair County Reporter.	Wright County Monitor.
	Waukon Standard.

#### GERMAN.

Der Wochertliche Demokrat. Iowa Staats Anzeiger.

#### BOHEMIAN.

Slovan Americky.

The following list of books and pamphlets, received from abroad during the last biennial period, is very suggestive, not merely for what it contains, but for what it does not contain. Almost every State in the Union now has a Historical Society, which is ready to exchange with us; and many publications of value would be sent every year to our collection, if it were known that they would be received and properly cared for. The services of a single officer, sufficiently paid to devote his time to the work, would be abundantly repaid by the valuable library thus gathered. We have no means to pay such an officer; and we have no individual looking for such a place; and therefore the State loses the benefit of the exchanges, and of donations that actually press for reception.

Bulletin of American Geographical Society, sessions 1876-7.

New York Genealogical and Biographical Record, 1877-78.

Monthly Weather Review to date.

Speech of Wm. B. Allison, in Senate, Dec. 13, 1877, on resolution for payment of U. S. bonds in silver.

Annual Reports Board of Regents Smithsonian Institution, 1876 and 1877.

New England Historical Genealogical Register, 1878 and 1879 to date.

From Brig. Gen. G. S. Benet: Annual Report of Chief of Ordnance for 1877 (bound).

From Naval Observatory, Washington, D. C.: Meteorological Observations for 1875 (bound).

From New England Historical and Genealogical Society: Sketch of Life of Wm. Blanchard Towne.

From Secretary Treasury United States: Finance Report for 1877 (bound).

From Historical Society of Pennsylvania: Pennsylvania Magazine of History and Biography (quarterly) from Vol. 1 to date. Proceedings of New England Historical and Genealogical Society for 1878-9.

From Walter S. Briscoe, Assistant Librarian: Pamphlets relating to History of Amherst College, Mass.

From Secretary of War: Report of Chief of Engineers to Secretary of War, 1877.

From Department of State: Foreign Relations of U. S. for 1877, and pamphlets relating thereto.

From the Publishers: Annals of the Deaf and Dumb, Quarterly, 1878 and 1879, to date.

From Brig. Gen. A. A. Humphreys: Map of the Battle of Gettysburg—three sheets. U. S. Geological Explorations of the 40th parallel, by Clarence King, geologist in charge—Vols. IV, V, VI. Atlas of Geological Explorations of 40th parallel by Clarence King.

From A. R. Wickersham, publisher: Five bound volumes of The Washington Press, Washington, Washington county, from 1856 to 1876.

From A. E. Martin, warden: Biennial Report of Warden of Additional Penitentiary to Seventeenth General Assembly.

From State of Iowa: Supreme Court Reports, Vols. 44, 45, 46, 47, and 48.

From Minnesota Historical Society: Proceedings of Society from its organization to the admission of the State. Annual Report of Minnesota Historical Society for 1877.

From Wisconsin Historical Society: Twenty-fourth Annual Report. Catalogue of Picture Gallery of Society.

From New Jersey Historical Society: Proceedings of Society for 1878.

From Massachusetts Historical Society: Proceedings of, for 1876 and 1877 (bound). Historical Collections—3d series, vol. 4 (bound).

From Delaware Historical Society: Life and Military Services of Brig. Gen. Thomas A. Smyth (bound). Some Leaves from Early History of Delaware and Maryland. Historical Sketch of Oliver Evans. Reports concerning Public Schools of the city of Wilmington. Acts of General Assembly relating to city of Wilmington. Some Vital Statistics of city of Wilmington. Report of the City Solicitor of the city of Wilmington. Annual Report of Chief Engineer, etc., of the city of Wilmington. Annual



Report of Chief Engineer of Water Department of city of Wilmington. Annual Report of Chief Engineer and Registrar of the city of Wilmington.

From C. W. Hobart, Esq.: New York Weekly Tribune from 1856 to 1872.

From the Society: Proceedings of American Antiquarian Society, 1877

From Long Island Historical Society: Fourteenth Annual Report of the Society, 1877.

From the Secretary: Constitution and By-laws of New England Society of Orange, New Jersey.

Bulletin of Essex Institute, vols. 9 and 10.

Alabama Cairns, letter of J. Bancroft Davis to N. Y. Herald.

From the Author: Early settlement of Ohio. Centennial address at Washington county, Ohio, by Israel Ward Andrews, LL. D.

From Secretary of State: Report in relation to criminal returns of Iowa for 1874-5, by Josiah T. Young. Seventh Biennial Report of Iowa State Agricultural College and Farm.

From W. S. Appleton: Ancestry of Mary Oliver (bound). Memorials of the Cranes of Chilton (bound).

From Samuel A. Green, following pamphlets: Annual Report, School Committee, town of Boston, for 1876-7 and 1877-8. Proceedings at dedication of Jamaica Plain Branch of Boston Public Library. Arguments in behalf of preservation of Old South Meeting House. Roll of Students of Harvard University for 1866. Annual report of Boston Provident Association, 1876-7. Proceedings of Boston Provident Association 1876-7. Oration before Governor and Citizens of Boston, July 5, 1875, by James Freeman Clarke, 99th Anniversary of American Independence. Orations before City Authorities of Boston, July, 1870, 1872, and 1873.

From the author: History of the Suffolk Bank, by D. R. Whitney.

From the author: Natural and Revealed Religion—a sermon by C. D. Bradlee.

From the author: History of the War Department of the United States—by L. D. Ingersoll (bound).

From C. H. Lothrop, M. D.: Medical and Surgical Directory of Iowa for 1876, and 1878-79, 2 vols. (bound).

From Department of Interior: Contributions to History of Medical Education and Medical Institutes. Special Report by W. S. Davis, LL. D. Report of Commissioner of Education, 1877 (bound). Journals of Proceedings, Reports and Documents complete of the 41st, 42d, 43d, and 44th Congresses, 450 vols., bound in calf. Geographical Surveys West of the 100th Meridian, by Lt. G. M. Wheeler, in charge vols. II, III, IV, V, VI (bound).

Survey of the Northern Boundary of United States from Lake



of the Woods to Summit of Rocky mountains (bound). United States Official Register, 1877, 1878 and '79.

From Massachusetts Historical Society: Proceedings from 1791—1835 (bound).

From the author: Genealogy of the Whitney Family, 3 vols. (bound in morocco).

In conclusion, we beg leave to refer to our previous reports, for the recent work of the Society, and an estimate of the means necessary to enable the Society to do the work it has assumed, in the best possible manner. The only change we should make would be to credit upon the item of binding and that of cases, shelving, etc., the amount paid within the last two years, as appears by the treasurer's report, and to ask, instead of the sum of \$600 for secretary's and librarian's salaries, one sufficient to procure the services of a good man who should appreciate the full importance of his task, and devote his entire time to it.

(The estimate above referred to was made by a legislative committee of the Fourteenth General Assembly, in their report to that body, and as a matter of convenience is copied here from our former report:

For binding newspapers.....	\$ 1,000
For glass-cases, painting, and shelving.....	300
For rent of building .....	300
For fuel and lights.....	100
For secretary's and librarian's salaries .....	600
For printing .....	500
For postage, expressage, and incidentals .....	200
<hr/>	
Total for biennial period.....	\$3,000)

The officer, whose duty it is to subscribe this report, cannot sign the same without reminding your Excellency, and through you, the legislature of the State, that the State Historical Society is, in a peculiar sense, a contribution by all the citizens of Iowa to a common interest, in which no section or class of citizens ought to have any peculiar or selfish motive. He would respectfully ask that a visiting committee of the approaching legislature be instructed to

visit and inspect the work thus far done by the Society, and to suggest the means by which that work may be most efficiently done for the future.

All of which is respectfully submitted, on behalf of the Historical Society and the Board of Curators.

WM. G. HAMMOND,

*President of Iowa State Hist. Soc'y and Board of Curators.*

## TREASURER'S REPORT.

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IOWA STATE HISTORICAL SOCIETY *in account with* PETER A. DEY,  
*Treasurer.*

DR.—1877-8-9.

To 30 vouchers paid on incidental account...	\$294 38	
To 4 vouchers paid on stationery, binding, etc.....	259 90	
To 16 vouchers, salaries.....	328 75	
To 7 vouchers, rent.....	725 00	\$1,608 03
Dec. 1, 1879, To balance in hands of treasurer.....		40 87
		<hr/>
		\$1,648 90

CR.—1877.

Jan. 18.	By cash from H. S. Welton, former treasurer.	\$ 50 41	
June 14.	By cash from State treasurer (appropriation).	502 92	
July 13.	By cash from Thomas Hughes, Sec., books sold.....	83 00	
July 25.	By cash from Thomas Hughes, Sec., annals sold.....	6 00	
1878.			
April 15.	By cash from State treasurer (appropriation).	506 57	
1879.			
March 19.	By cash from State treasurer (appropriation).	500 00	\$1,648 90
Dec 1.	To balance in hands of treasurer.....		40 87







FIRST BIENNIAL REPORT

OF THE

CENTRAL STATION

OF THE

IOWA WEATHER SERVICE.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]

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DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





*To His Excellency, JOHN H. GEAR, Governor of Iowa:*

SIR—I have the honor to submit to you the first biennial report of the Central Station of the Iowa Weather Service, established by chapter 45, of the Acts of the 17th General Assembly.

Very respectfully yours,

GUSTAVUS HINRICHS,

*Director I. W. S.*

CENTRAL STATION I. W. S.,

IOWA CITY, IOWA, October, 1879.



# FIRST BIENNIAL REPORT.

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## INTRODUCTION.

THE people of any great State depend for prosperity very largely upon the condition of the weather. However skillfully we may cultivate the soil, and however faithfully we may sow and plant, unless fertilizing rains and the all developing energy of the sun favor us throughout the season, we shall reap but a slight reward for skill and labor. And even the state of health of body and mind is profoundly influenced by these atmospheric conditions; the generally dry state of the atmosphere, the prevailing clear sky, transmitting the purifying activity of the sunbeam with but a small loss, together with the bracing winds and miasma-killing cold of winter, are beginning to produce a generally favorable influence on the race now forming here and in the neighboring portions of the northwest.

The great importance of the ever varying conditions of the weather has been recognized by almost all civilized states and nations by the establishment and support of special institutions for the accurate observation, and the proper reduction and publication, of these conditions of the weather, leading as far as possible to the discovery of the laws regulating these changes. Every series of statistical results of meteorological observations, carried on according to a uniform plan for a series of years is of the highest value both to science and practice, a value which constantly increases with time.

One of the most recent foundations of this kind is the weather service of our own State. Although covering the large territory of the State, fully equal to a kingdom in extent, the means at the disposal of the service are but small, very small indeed if compared to the endowment of other institutions of a like character. These two facts, of recent establishment and very limited means, should not be lost sight of when critically examining the results of our weather service.

It has been my earnest endeavor to learn what we can successfully

do within our sphere, and to urge all who co-operate to pay the greatest attention to that which is the most important. In this manner we have secured quite a liberal representation of stations in all portions of the State, and have promptly received very full reports at the close of each month. The most notable results of these station reports have been published in a "Bulletin," and have also quite extensively been re-published by the press of the State, while the more complete data are embodied in the "Reports" of the service, which reports are being published as fast as possible.

It is hoped that the work done will prove of credit to our State abroad, and will be kindly received at home.

#### VOLUNTEER OBSERVERS.

During the past two years, one hundred and forty-five persons have enrolled themselves as volunteer observers of this service. A majority of these have been regularly supplied during temporary absence from home by an associate observer, specially trained for the purpose.

The Service depending entirely on volunteers for its station reports, a larger aggregate body of observers is necessary than the number of stations represented. All changes in the corps of observers cause additional work at the Central Station, but these changes are unavoidable, for in our comparatively new State people change residence more frequently than in older states; besides, some observers will drop out by neglect, or by disease, and two have been lost by death. In a few cases persons have volunteered to act as observers, but found the task too great.

To reduce the changes of observers to the least possible, we have, for 1879, introduced the system of volunteering for a year by filling out and signing the blank form printed on opposite page. The results of this system have been very satisfactory, both in reducing to a considerable extent the work of management at the Central Station, and in giving the volunteer observer a more definite understanding of what he is expected to do. It will be noticed that, while the volunteer observer determines for himself the amount of work he engages to do for the service, he promises to carry on the work selected by himself for one year.

[COPY OF BLANK FORM.]

## IOWA WEATHER SERVICE, DR. G. HINRICHS, DIRECTOR.













## VOLUNTEER OBSERVER'S PERSONAL RECORD FOR 1879.

Full name of Volunteer Observer, written *plainly*.

Business Avocation, \_\_\_\_\_

Post-office Address, Town, \_\_\_\_\_, County, \_\_\_\_\_

The Central Office furnishing me the necessary Book of Record, Blank of Report and Notes, Stamped Envelops, addressed to Central Office; also one copy free of all official publications of said office, I hereby promise to carefully and regularly observe, accurately, distinctly, and neatly to record, faithfully to copy and revise this report monthly, and promptly at the close of each calendar month to mail this copy as *Report*, to the Central Office, to the extent as indicated by my written "Yes," in the blank below:

Weather Station.	Rain Station.	1.	Rainfall, amount, measured at noon.	Write "Yes" after those you volunteer to do, write "No" after each you will not do.
		2.	Phenomena, their kind, intensity, and time of occurrence, (especially       ) • { also      and  } (halos and coronæ.	
		3.	Sky and wind, daily at noon.	
		4.	Thermometer, daily at noon.	
			In addition to the preceding, also—	
		5.	Sky and wind at 8 a. and 8 p.	
		6.	Temperature at 8 a. and 8 p.	
		7.	Barometer at noon.	
		8.	Barometer at 8 a. and 8 p.	
		9.	Any additional regular observation. (state which).	

In case of my absence, or if otherwise prevented from performing this voluntarily assumed duty, the Associate Observer, \_\_\_\_\_

who has been trained during \_\_\_\_\_ months, by me in this work, will see that no break in the record of this station will occur.

Signed, \_\_\_\_\_

• Dated, \_\_\_\_\_

NOTE.—Please to promise no more than you think you are able to do. Continued, prompt, and regular reports of a rain station are more valuable than interrupted or tardy reports from a weather station.

The following is a complete alphabetical list of volunteer observers for the preceding two years. It would be interesting to add the number of reports contributed by each one of these observers, but in the Report of the Service the annual synopsis distinctly exhibits these facts for each entire calendar year, so that the work of making such exhibit for the fiscal year is hardly necessary.

### VOLUNTEER OBSERVERS, IOWA WEATHER SERVICE.

NAME.	POST-OFFICE.	COUNTY.
Al Adams, editor.....	Dakota .....	Humboldt.
S. S. Ainsworth .....	West Union.....	Fayette.
Guy P. Arnold, farmer.....	Garden Grove.....	Decatur.
M. V. Ashby, surveyor.....	Afton .....	Union.
James Barr, M. D.....	Algona .....	Kossuth.
Hiram M. Bassett, M. D.....	Mt. Pleasant .....	Henry.
George Baur, farmer.....	Near Winterset.....	Madison.
J. T. Beem, attorney.....	Marengo .....	Iowa.
Theodore W. Bennett, M. D .....	Crawfordsville. ....	Washington.
C. E. Bessey, professor.....	Ames .....	Story.
Charles A. Bond, B. Ph.....	Storm Lake.....	Buena Vista.
F. J. Boutin, teacher.....	Hampton .....	Franklin.
A. B. Bowen, M. D.....	Maquoketa .....	Jackson.
A. H. Box.....	Floris .....	Davis.
Col. G. B. Brackett.....	Denmark.....	Lee.
Caleb Brown, M. D.....	Rose Hill .....	Mahaska.
G. S. Brown, jeweler.....	Cherokee.....	Cherokee.
Wm. D. Brown, C. E.....	Dallas Center.....	Dallas.
M. J. Campbell.....	Sibley .....	Osceola.
Robt. M. Carothers.....	Vinton .....	Benton.
Prof. G. C. Carpenter.....	Indianola .....	Warren.
Hiram Carpenter, farmer.....	Near Webster City....	Hamilton.
Frank H. Carter, cashier.....	Elkader.....	Clayton.
Luther L. Cassidy, C. E.....	Winterset.....	Madison.
Geo. D. Clark, druggist.....	Fairfield .....	Jefferson.
Prof. Alonzo Collin.....	Mt. Vernon.....	Linn.
H. H. Colt, editor.....	Nora Springs .....	Floyd.
Wm. A. Cook, druggist.....	Washington .....	Washington.
E. J. Couch, farmer .....	Grand Junction.....	Greene.
Edward E. Crady, druggist.....	Sioux City.....	Woodbury.
E. S. Creswell, farmer.....	Creston.....	Union.
B. H. Criley, M. D.....	Dallas Center.....	Dallas.
D. W. Crouse, M. D.....	Waterloo .....	Black Hawk.
O. E. Daniels.....	Hampton .....	Franklin.
Prof. W. C. Davis.....	Red Oak.....	Montgomery.
Seth Dean .....	Glenwood .....	Mills.
James P. Dickinson, farmer.....	Guttenberg .....	Clayton.
H. G. Dorchester.....	Bellevue .....	Jackson.
Hon. Joseph Dysart.....	Dysart .....	Tama.
A. J. Earl.....	Anita .....	Cass.
J. M. Elder, attorney.....	Concord .....	Hancock.
J. P. Farnsworth, M. D.....	Clinton .....	Clinton.
Luther P. Fitch, M. D.....	Charles City .....	Floyd.
Frank Fletcher, student.....	Iowa City.....	Johnson.
A. T. Flickinger, attorney.....	Council Bluffs .. ...	Pottawattamie.

## VOLUNTEER OBSERVERS, IOWA WEATHER SERVICE—CONT.

NAMES.	POST-OFFICE.	COUNTY.
Thos. M. Goddard, attorney.....	Centerville.....	Appanoose.
Prof. H. L. Grant.....	Waverly.....	Bremer.
John W. Gustine, M. D.....	Carroll.....	Carroll.
Oscar F. Hale.....	St. Joseph.....	Kossuth.
Chas. S. Hall, engineer.....	Eldora.....	Hardin.
Miss Mary Hamilton, A. B. ....	Bloomfield.....	Davis.
R. R. Hanley, editor.....	Sidney.....	Fremont.
Geo. F. Hard, horticulturist.....	Des Moines.....	Polk.
James Harkness, farmer.....	Hesper.....	Winneshiek.
Henry Hatch.....	Wittemore.....	Kossuth.
Chas. A. Helmick, student.....	Columbus City.....	Louisa.
Prof. W. H. Herrick.....	Grinnell.....	Poweshiek,
Emmett F. Hill.....	Spirit Lake.....	Dickinson.
Gershom H. Hill, M. D.....	Independence.....	Buchanan.
Miss Anna Hinrichs.....	Iowa City.....	Johnson.
Gustavus Hinrichs, Jr.....	Iowa City.....	Johnson.
Curtis Houghton, farmer.....	Near Fairfield.....	Jefferson.
B. F. Hoyt, B. Ph., naturalist.....	Columbus.....	Nebraska.
H. C. Huntsman, M. D.....	Oskaloosa.....	Mahaska.
Gilbert R. Irish, farmer.....	Near Iowa City.....	Johnson.
Prof. Thos. M. Irish.....	Dubuque.....	Dubuque.
C. W. Jarvis, farmer.....	Emmet.....	Emmet.
Abijah Johnson, M. D.....	Earlham.....	Madison.
Joseph E. Jones, M. D.....	Stellapolis.....	Iowa.
M. H. Kling.....	Mason City.....	Cerro Gordo.
H. S. Kridelbaugh, M. D.....	Clarinda.....	Page.
Frank Landers, farmer.....	Webster City.....	Hamilton.
Miss Augusta Larrabee.....	Clermont.....	Fayette.
Miss Rachel Larrabee.....	McGregor.....	Clayton.
Frank Larrabee.....	McGregor.....	Clayton.
Mrs. K. E. Law.....	Forest City.....	Winnebago.
M. F. LeRoy, attorney.....	Manchester.....	Delaware.
Enoch Lewis, M. D.....	Albion.....	Marshall.
John Lewis, M. D.....	Hesper.....	Winneshiek.
Norman Lewis, farmer.....	Hamlin.....	Audubon.
Mrs. Melissa Lewis.....	Hamlin.....	Audubon.
B. S. Louthan, M. D.....	Dysart.....	Tama.
Mrs. B. S. Louthan.....	Dowville.....	Crawford.
J. B. McCartney.....	Villisca.....	Montgomery.
Frank McClintock.....	West Union.....	Fayette.
Chas. McCormick, teacher.....	Atlantic.....	Cass.
Wm. J. McGee, surveyor.....	Farley.....	Dubuque.
Theodore Marks, horticulturist.....	Hopkinton.....	Delaware.
Gregory Marshall, farmer.....	Cresco.....	Howard.
James C. Michener, M. D.....	Adel.....	Dallas.
Edwin Miller, P. M.....	Grant City.....	Sac.
S. C. Mitchell, merchant.....	Leon.....	Decatur.
Giles C. Moorehead, M. D.....	Ida Grove.....	Ida.
John R. Morledge, attorney.....	Clarinda.....	Page.
M. M. Moulton.....	Monticello.....	Jones.
Mrs. R. P. Tilden Nipher.....	Near Iowa City.....	Johnson.
C. G. Perkins, P. M.....	Onawa.....	Monona.
Hon. Wm. B. Perrin.....	Nashua.....	Chickasaw.
J. J. Pocock, druggist.....	Le Mars.....	Plymouth.
E. T. Preston, farmer.....	Near Newton.....	Jasper.
Solon, B. Prindle, druggist.....	Fort Dodge.....	Webster.

## VOLUNTEER OBSERVERS, IOWA WEATHER SERVICE—CONT.

NAMES.	POST-OFFICE.	COUNTY.
J. Duncan Putnam, naturalist.....	Davenport .....	Scott.
Mrs. May U. Remley .....	Anamosa .....	Jones.
Chas. Rice, M. D. ....	Smithland .....	Woodbury.
Thos. D. Rigg, M. D., druggist.....	Tipton .....	Cedar.
Francis H. Robbins, druggist .....	Waukon .....	Allamakee.
Luke Roberts .....	Clinton .....	Clinton.
Prof. C. P. Rogers.....	Marshalltown ..	Marshall.
J. F. Sanborn, M. D., dentist.....	Tabor.....	Fremont.
Conrad Schadt, druggist.....	Amana .....	Iowa.
Schiller C. Schramm .....	Fort Madison.....	Lee.
Elijah Seeley .....	Rolfe .....	Pocahontas.
O. H. Seeley, farmer .....	Kasson .....	Madison.
Rev. Thomas L. Sexton .....	New London....	Henry.
Prof. D. S. Sheldon..	Davenport .....	Scott.
Charles L. Sherman, druggist .....	Anita .....	Cass.
H. N. Sill, M. D.....	Strawberry Point.....	Clayton.
Sidney Smith, merchant.....	Sac City.....	Sac.
Jacob Stern, farmer.....	Logan .....	Harrison.
Mrs. S. F. Stewart .....	Chariton .....	Lucas.
S. O. Stockslager, M. D.....	Florence .....	Benton.
Chas. S. Stryker, farmer.....	Creston .....	Union.
A. S. Stuver, attorney.....	Newton.....	Jasper.
Benjamin Talbott, professor .....	Council Bluffs. ....	Pottawattamie.
Charles E. Tibbets, professor.....	Oskaloosa .....	Mahaska.
John L. Therme, druggist .....	Farmington ..	Van Buren.
A. W. Thompson .....	Brooklyn .....	Poweshiek.
G. W. Thompson .....	Dunlap .....	Harrison.
A. A. Veblen, professor .....	Decorah .....	Winneshiek.
Chas. Wachsmuth, M. D., naturalist.	Burlington.....	Des Moines.
Hon. J. K. Wagner, M. D.....	Blairstown.....	Benton.
Chas. F. Waldron, M. D.....	Brush Creek.....	Fayette.
Wm. Ward.....	Near Algona.....	Kossuth.
Carl Werner, farmer.....	South Amana.....	Iowa.
Horatio Wetherell, farmer .....	Horace .....	Audubon.
Mrs. Daniel B. Wheaton .....	Near Independence...	Buchanan.
A. O. Williams, M. D..	Ottumwa .....	Wapello.
James S. Whittaker, merchant.....	Corydon .....	Wayne.
F. M. Witter, professor .....	Muscatine .....	Muscatine.
Arthur L. Wright, M. D.....	Carroll.....	Carroll.
John C. Wright, M. D.....	Clear Lake.....	Cerro Gordo.
Wm. E. Wright, M. D. ....	Knoxville.....	Marion.
Morris Wygant, farmer .....	Denison .....	Crawford.
R. P. Wylie, professor.....	Aledo .....	Illinois.
Henry Young, M. D.....	Manson ..	Calhoun.



The great majority of these observers have proved themselves faithful to the task they have voluntarily assumed for the benefit of the service, and have thereby merited the thanks of the public. It would be very desirable to be able to furnish a full set of standard instruments to about twenty of the best observers, properly distributed over the State.

#### SUPERVISION OF THE STATIONS.

The management of the work of so many observers requires a great amount of correspondence, in addition to the printed directions furnished each observer, and the circular letters (printed by electric pen and duplicating press), issued from time to time, as called for by special circumstances. Besides, a personal inspection of the stations, combined with revision of the instruments and personal instruction of the observers, is needed at least once in three years for each station.

Thus far it has been impossible to find the time for such visits of inspection, except to a limited extent. The service is under obligation to quite a number of railroads in the State for passes, but few of which have thus far been actually used, for lack of time. The most extended tours of inspection were made by me in July and August, 1878. To make these trips as useful as possible to the State, I made, by the means of instruments kindly loaned by the Coast Survey, a preliminary magnetic survey of our State, being the first systematic survey of this kind ever undertaken in Iowa.

The labor of supervision of stations and observers during the past two years has been much greater than anticipated; but, being work of prime importance, involving the value of the results obtained, the necessary time has been taken, though the preparation of the final reports has thereby been delayed.

#### STATION REPORTS.

During the year 1878, fifty-four stations sent complete reports for each of the twelve months, or 648 monthly reports; thirty-four stations sent 245 monthly reports in the aggregate; so that 893 monthly reports were received from eighty-eight stations in the year. In addition, a considerable number of observers sent a synopsis of the entire year, and fifteen stations furnished decade reports for three of the summer months. Nearly all observers secured a health report for the summer months from a reliable physician in their town. The entire

number of reports received from stations in 1878, thus, will exceed eleven hundred.

It is hardly necessary to add, that every one of these reports is carefully filed for reference. The system of filing adopted is so simple that any specified report can be produced in a few moments.

For the present year, the summing up of the reports received has not yet been made. As an indication of the number of reports received, I give the following table, comprising only the reports which were received promptly, that is, in time for use in the preparation of the *Press Bulletin*, drawn up on the 3d or 4th of each month:

	June.	July.	August.	Summer.
Monthly reports .....	82	76	81	239
Pentade reports.....	78	78	78	234
Special reports.....	28	10	....	38
Total weather reports .....	188	164	159	511
Crop reports .....	54	40	102	196
Total reports received.....	242	204	261	707

The total number of reports received from the stations will, for the present year, probably exceed two thousand.

The reports received from the stations after the *Press Bulletin* has been drawn up are considered tardy, and have not been included in the above table; but they are all used in preparing the final report of the service. For July, sixteen monthly reports were received after the close of the *Bulletin*, bringing the total number of monthly station reports, for July, 1879, up to ninety-two.

#### THE PRESS BULLETIN.

Promptly upon the receipt of the Station Reports, they are carefully examined and revised as to the summing up, and the most important data contained in them are tabulated for future publication, and for immediate use. These results are also entered upon blank maps, and from the tables and maps and notes thus obtained from the entire body of station reports received up to noon of the fourth of each month, the *Press Bulletin* of the preceding month, is drawn up. The *Press Bulletin* was printed by electric pen and duplicating press until January, 1879, when a general rule issued by the Postmaster-Gen-

eral requiring letter-postage on such printed matter made a change to ordinary print necessary. Since then this rule has been revoked, but the mode of publication of the *Press Bulletin* has remained the same, because the ordinary letter-press is so much more readable than electric pen work.

Advance proofs for publication are mailed (on the 4th or 5th) to all dailies of the State having promised to publish the same in full or in part. An edition of six hundred copies of this *Press Bulletin* in quarto is the next day mailed to all volunteer observers, all State officers and State institutions, to all members of the General Assembly, to a large number of weeklies which have promised to republish the same at least in part, and to meteorologists and meteorological institutions at home and abroad.

The *Press Bulletin* gives, in words, a brief history of the condition of the weather for the preceding month, based upon the observations made at the Central Station, and at all individual stations throughout the State as far as their reports are received up to the fourth of the month following. The *Bulletin* is therefore very full and reliable, although as brief as possible.

It is published more promptly than the corresponding publication of any other weather service.

The *Press Bulletin* for September, 1879, is the 74th in the series issued; a series of bulletins giving a concise and reliable history of the condition of the weather in Iowa for the past four years. It has directly, and by republication in the papers indirectly, been brought to the knowledge of a large portion of the people of the State. During the season just closed, the *Press Bulletin* also contained a brief account of the condition of the principal crops at the close of the month, based upon the reports received from the crop reporters of the service.

During the year 1878, the *Bulletin* published at the Central Station by means of the electric pen comprised, in addition to the *Press Bulletin*, one page quarto of weather maps of the State, and one page quarto of noon observations at the Central Station. At times, the *Bulletin* comprised six pages quarto; but the work of preparing the same interfered so much with the labor required for the final report, that for this year the monthly bulletin of the service has consisted exclusively of the *Press Bulletin* referred to.

In this connection it may be proper to state that the Central Station furnishes a *daily bulletin* to the dailies published at Iowa City, and that nearly thirty stations furnish local papers with a *weekly bul-*

*letin* for publication. It is hoped that in a near future all stations will furnish their local papers with such weekly bulletins.

### THE IOWA WEATHER REPORT.

The final report, which it is my duty to prepare, is in course of publication, and enough has been published already to judge of the value of the same. While other services, having a distinct corps of officers, whose sole duty it is to attend to the work of such service, are usually several years behind date with their final report our State service is but one year behind date with its final report. By reducing the labor of supervision of stations, and especially by cutting short the work involved in correspondence, it is hoped in another year to reduce this interval to but a couple of months. In this connection it should also be borne in mind that the very large share of work required for the preparation of the final report rests upon me, and has to be done at the time which should be devoted to rest and recreation after the completion of the hard day's work of professional labor. The selection of the material and form of the final report has been a subject of very considerable study to me. In this weather report, the climatological facts should be made prominent, and as far as possible the form should harmonize with international rules, so as to facilitate all comparisons.

The IOWA WEATHER REPORT is published in 8 vo., and consists of two parts. The first part comprises monthly and annual tables of the results of observation at the stations of the service. Part second contains descriptions of noted storms and of other remarkable phenomena and general results. In this manner, the more statistical data are all printed by themselves, and arranged in the most convenient form for reference. In part second a full description of the great storm of Easter Sunday, April 21, 1878, has been issued thus far. The description is illustrated by a series of maps, photo-electrotypes of my drawings. One of these maps gives the tracks of the tornadoes which moved up along the valleys of the Boyer and Maple rivers.

In the same manner other storms, meteors, etc., will be described and illustrated in this part.

Part first gives, on the first sixteen pages, a brief enumeration of stations and observers, the division of the State into twenty-seven weather districts adopted, illustrated by a map; also, statistics of population, timber area, magnetic declination, and other matter of interest. Now follows the tabular exhibit of the weather for the entire State by

months and by the year, the exhibit for each month being exactly of the same form and extent; and, to still more facilitate the use of these tables, each month has a separate and heavy inside paging. The following shows the contents of each of these monthly forms of sixteen pages:

*Page 1.* Reprint of *Press Bulletin* of the month.

*Pages 2 to 5.* *Observations at the Central station*, namely: on pages 2 and 3, the result of observations at 7 A. M., 2 P. M., and 9 P. M., printed in full in the form adopted by the International Congress of Meteorologists; on page 4, the noon observations at the Central station are given, together with a very important table of the *change* of the indications of the barometer and thermometer; and on page 5, insolation, sun-spot, and ozone observations, together with the international summary.

*Pages 6 to 8.* *Summary of observations at all stations of the service.* In this summary the stations are arranged invariably in the same order, beginning with the northwest and running down to the southwest, then taking up the middle part of Iowa, as north, central, and south; and finally giving eastern Iowa in a like manner from northeast to southeast. A comparison of any of these tables with the map accompanying the report will show the advantage of this system. At the same time it should be stated that the reports for each month are filed in exactly the same order in the filing-case of the month, so that the corresponding report of the station can be instantly produced.

This summary comprises total rainfall, and the greatest rainfall on one date, giving that date; also, the number of days with rainfall, snow, thunder and lightning; also the actual amount of rainfall collected, on the most noted storm-day or storm-days of the month; finally, an enumeration of the most important phenomena observed, these phenomena being printed in a very small space by using the international weather symbols, special matrices of which were cut expressly for this service. All of these data are obtained by my own personal examination and revision of the station reports sent by volunteer observers. Brief notes accompany these tables when circumstances require it.

*Pages 9 to 14* for each month give the observations in full at ten stations for each day, arranged so as to contain five days to the page. The ten stations have been selected to satisfy two requirements, namely, a proper distribution of the ten stations over the entire territory of the State, and the presence at the station of a good observer. By means of these tables, weather-maps can be constructed for each day,

and for the three hours of observation of each day, giving a sufficiently full exposition of the weather at each of these hours throughout the State. In other words, the six pages 9 to 14, of each month, give a concise tabular exposition of the weather for the entire State for three distinct hours of observation for each day. By means of these tables it is therefore easy to find the condition of the weather at any time for any part of the State. To still further enhance the value of these synoptic tables, the list of stations has been raised to thirteen for 1879, so as to occupy pages 9 to 16, four dates to a page, as will be seen by reference to the report for April, 1879, the only one of 1879 as yet published.

*Page 15* gives tabular exhibit of the temperature and rainfall in the principal districts of the United States from published data of the Signal Service.

*Page 16* gives the results for the month of the oldest series of observations in Iowa, namely the observations of Prof. T. S. Parvin, in Muscatine (1839 to 1859), and at Iowa City (1860-1874.)

Thus far it has been impossible to publish the very full series of weather maps which I have to construct for each month and for shorter periods, exhibiting the distribution of rainfall, rain frequency, heavy rainfall, thunder-storms, etc. The means at the disposal of the service are insufficient for this purpose. To give an idea of the character of these maps, a number have been drawn by me with the electric pen and published in the *Bulletin* of 1878; and a smaller number have been photo-electrotyped from my drawings and printed as plates in the report. It would be very desirable if the full series of maps could be so published or lithographed.

This brief exposition of the contents and systematic arrangement of the Iowa Weather Report, and an examination of the portions actually published, will show that the duty imposed upon me has not been neglected. It is my ambition that the thought and labor bestowed upon this Report may prove useful to the State and to science.

In conclusion I would add, that the brief Report for 1877 was put through the press during the year 1878, and therefore constitutes work done during this biennial period.

I would also call especial attention to the fact, that the matter for all monthly parts up to date is ready for the printer, excepting only the three pages of synopsis of all stations (pp. 6 to 8 of each month); and these pages lack only the entry of the *tardy stations*; *i. e.*, stations,

the report of which were not received in time for the *Press Bulletin*. From this statement it will be seen that we may expect a more rapid publication in the future.

#### CROP REPORTS.

Sunshine and Rain being the principal meteorological conditions affecting the growth and development of plants, it is of great scientific importance to trace the effect of the varying intensity of these cosmical and atmospheric agencies on the most important and most uniformly distributed plants, *i. e.*, the crops. Since Iowa has not yet any system whereby the condition of the growing crops is regularly examined and reported, and these reports tabulated and published, it was doubly important to attempt this work.

Accordingly, I issued a circular-letter-early in April, 1879, inviting qualified persons, especially practical farmers, to volunteer to act as Crop Reporters for the season. A very favorable response was generally made, and enough crop reports were received for April 30 to give already in the *Press Bulletin* for April a brief statement concerning the condition of the crops in our State on that date.

Crop Reports have been received regularly until October from quite a number of responsible volunteer crop reporters, and after tabulation and mapping the results ascertained have been published in the *Press Bulletin*.

In addition a more complete Harvest Report was obtained on blanks furnished, the data not yet published will be presented in the second part of the Weather Report for 1879.

The reports so obtained differ materially from others of this kind in having the results stated, not in the alphabetical order of the counties, but by regions as marked on the crop maps constructed from the reports received. I shall take pains to insert at least a few of these maps in the Report.



## CROP REPORTERS.

*The following is an alphabetical list of the volunteer crop reporters of the Service.*

NAME.	P. O. ADDRESS.	COUNTY.
J. A. Alexander.....	Crawfordsville.....	Washington..
Washington Allen.....	Sac City.....	Sac.
Capt. G. A. Appelman.....	Clermont.....	Fayette.
I. P. Bailey.....	Sibley.....	Osceola.
Wm. Bowman.....	Maquoketa.....	Jackson.
A. N. Buckman.....	Harlan.....	Shelby.
Thos. M. Cassin.....	Bellevue.....	Jackson.
Geo. C. Calkins.....	Hayes.....	Adams.
P. R. Clark.....	Tabor.....	Fremont.
Hon. B. F. Clayton.....	Macedonia.....	Pottawattamie.
E. J. Couch.....	Grand Junction.....	Greene.
Hon. Joseph Dysart.....	Dysart.....	Tama.
B. T. Edwards.....	Webster City.....	Hamilton.
J. M. Elder.....	Concord.....	Hancock.
Thos. J. Evans.....	Stellapopolis.....	Iowa.
S. A. French.....	Faulkner.....	Franklin.
M. B. Frisbie.....	Walnut.....	Pottawattamie.
Wm. P. Gildings.....	Algona.....	Kossuth.
Henry Hosper.....	Orange City.....	Sioux.
Ed. Hartsock.....	Clarion.....	Wright.
H. P. Hatch.....	Wittemore.....	Kossuth.
Curtis Houghton.....	Fairfield.....	Jefferson.
James Hughes.....	Centerville.....	Appanoose.
R. W. Humphrey.....	Charles City.....	Floyd.
M. L. Ink.....	Mt. Vernon.....	Linn.
G. R. Irish.....	Iowa City.....	Johnson.
Nelson Johnson.....	Decorah.....	Winneshiek.
J. R. Kenyon.....	New Hampton.....	Chickasaw.
H. R. Laird.....	Sidney.....	Fremont.
Hon. Frank Larrabee.....	McGregor.....	Clayton.
Chas. W. C. Law.....	Davenport.....	Scott.
B. F. Little.....	Brush Creek.....	Fayette.
B. T. Louthan.....	Dowville.....	Crawford.
John McDonough.....	Woodburn.....	Clarke.
Robert W. McGee.....	Ida.....	Ida.
S. P. McNeill.....	Garden Grove.....	Decatur.
Hon. Samuel McNutt.....	Muscatine.....	Muscatine.
Capt G. A. Madson.....	Ottumwa.....	Wapello.
Gregory Marshall.....	Cresco.....	Howard.
O. Midland.....	Fort Dodge.....	Webster.
Edwin Miller.....	Grant City.....	Sac.
N. F. Miller.....	Knoxville.....	Marion.
Hon. W. D. Mills.....	Marshalltown.....	Marshall.
B. Moore.....	New York.....	Wayne.
O. A. Moore.....	LeMars.....	Plymouth.



## CROP REPORTERS—CONTINUED.

NAMES.	POST-OFFICE.	COUNTY.
W. D. Ogden.....	Hamlin.....	Audubon.
Thos. Parker.....	Des Moines.....	Polk.
Hon. Chas. Paulk.....	Waukon.....	Allamakee.
H. M. Perry.....	Afton.....	Union.
S. H. Pettibone.....	Algona.....	Kossuth.
Hon. C. C. Platter.....	Red Oak.....	Montgomery.
N. H. Reintz.....	Aplington.....	Butler.
Julius C. Riley.....	Osceola.....	Clarke.
S. G. Rogers.....	Logan.....	Harrison.
A. B. Scott.....	Fairfield.....	Jefferson.
L. W. Scott.....	Hesper.....	Winneshiek.
E. D. Seeley.....	Rolfe.....	Pocahontas.
C. P. Sheldon.....	Tipton.....	Cedar.
Maj. E. H. Smith.....	Dubuque.....	Dubuque.
W. G. Smith.....	Lamoille.....	Marshall.
David Stanton.....	Earlham.....	Madison.
T. E. Stevens.....	Mt. Pleasant.....	Henry.
S. Stewart.....	Chariton.....	Lucas.
Jesse Strawbridge.....	Iowa City.....	Johnson.
C. S. Stryker.....	Creston.....	Union.
W. Sutherland.....	Estherville.....	Emmet.
Thomas S. Teylor.....	Denmark.....	Lee.
Hiram Thomley.....	Wolfdale.....	Woodbury.
F. A. Tiedemann.....	Pleasant Grove.....	Des Moines.
Hon. C. E. Whiting.....	Whiting.....	Monona.
Jas. Wood.....	Anamosa.....	Jones.
L. W. Wough.....	Spirit Lake.....	Dickinson.
Morris Wygant.....	Denison.....	Crawford.

I beg leave to thank these gentlemen for the trouble they have taken in behalf of the service. Quite a number of these seventy-three reporters have already notified me that they will also report for the next season. May we hope that the season will prove as favorable as the one now closed.

## CENTRAL STATION.

The central *station* proper of a system of meteorological observations comprises the observatory at which the series of observations made is the most comprehensive and complete in the service, and at which instruments and methods are tested for the use of the other stations of the service. At the same time, it is very desirable that the observers should occasionally visit the Central Station for instruction.

As the service does not possess means for building such an institution, and as improved accommodations for these purposes were absolutely required for the good of the service, I have, during the past season, built an observatory, sufficient for our present wants, and as complete as I may hope to be able to pay for in a reasonably near future.

This Observatory for the Central Station comprises a room on the third floor,\* with almost free view to all sides of the horizon, and the flat roof or terrace above the same. Both in the room and on the terrace instruments are placed for the observations recorded on the four pages (2 to 5), of each monthly number of the Report. These observations comprise four regular observations daily on the barometer, thermometer, hygrometer, and other instruments, giving the pressure, temperature, humidity, cloudiness, cloudform, direction, and force of the wind, and the rainfall. Also three daily observations of the ozone of the air, and two daily observations of the noon and maximum insolation, that is, the temperature indicated by a thermometer, the blackened bulb of which is inclosed in a vacuum tube and freely exposed to the sun. The maximum and minimum thermometers are also observed daily. Whenever possible the sun's disk is carefully examined for sun-spots by means of a telescope belonging to the laboratory of the State University and used for this purpose at this institution, except during vacation, when these observations are also actually made at the Central Station. In addition, all notable changes and meteorological phenomena are observed and recorded.

A more complete meteorological and physical observatory should be possessed by a great State like Iowa, best in connection with its State University, so that still more complete observations could be made under unchanging conditions on the atmospheric and physical constants of the State. A full set of self-registering instruments should

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\* The corresponding room on the second floor serves largely for the purposes of Central Office, and contains the file of Station Reports and publications.

complete the observations made by the observers maintained at such an institution. In this manner, data would be obtained, more complete and extensive than can be obtained by any one person at even the greatest sacrifice of time and means; and, the installation of the instruments being maintained unchanged for centuries, a true history of the change of climate, if any, would be obtained. Until the State shall generally feel the need of such an institution,\* the small observatory which now constitutes the Central Station will have to suffice, at least so long as I may be able to maintain the same and to carry on the very full series of observations enumerated above.

In addition to my own observations referred to, a series of observations is being made by my daughter, exactly like those made throughout the State at the ordinary Weather Stations of the Service. By this means it will be possible in a near future to determine the small corrections which the ordinary temperature observations may be subject to, provided the exposure of the thermometers and the individual corrections of these latter, shall have been determined during the personal inspection of the Station by the director.

Finally, to cheaply provide the observers with thermometers and barometers, a few of such instruments are constantly being compared with the standard instruments at the Central Station, and afterwards furnished to such of the observers as desire to procure them, upon refunding the maker's wholesale price—the cost of transportation being borne by the service, and comparison and table of corrections being made free of charge by me. In this manner, the observations of temperature and pressure become quite reliable, though it would be desirable for the State to furnish, say twenty qualified observers, properly distributed over the State, with first-class standard instruments to remain the property of the Service.

One of the more important duties performed at the Central Station, is the hoisting of

#### WEATHER-FLAGS,

indicating, with a high degree of probability, the approaching condition of the weather. These flags are nine in number, of three colors, and three different forms of each color. The *red* colored flag indicates a high barometer for the season, the *blue* flag signals a low barometer, while the ordinary or average height of the barometer is represented by

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\* The construction of such an institution was recommended by me in my report to the president of the University, six years ago.

a *white* flag. The change of the barometer is signaled by the *form* of the flag. A streamer, or pointed long flag indicates that the barometer is *rising*; a cut-out flag or guidon, shows that the barometer is *falling*, while a *stationery* barometer is represented by a square flag. The motion and direction of the flag signal also indicates the force and the direction of the wind, while the state of the sky is visible to all. But the condition of the *barometer*, as to hight and change, the direction and force of the *wind*, and the condition of the *sky* constitute the three elements which generally determine the condition of the coming weather according to simple rules. When hoisted by experienced observers, familiar with the normal conditions of the weather and the normal course of the barometer in their locality, and when proper regard is taken by these observers of other signs of the weather, especially of the condition of the sky at sunset, humidity of the air, coronæ, and halos, the observer will but rarely fail promptly to recognize the coming high or low barometer, and thus his signal flags will prove of great utility at his station. If by additional means a few telegrams can be transmitted to and from stations, a still higher degree of reliability can be obtained.

In this connection a few general facts should not be lost sight of:

*First.* Great and extensive disturbances of the atmosphere, that is, extensive storms, never will be missed by this system of signaling, and smaller, though locally quite intense, storms will in no other way be indicated.

*Second.* The inferences drawn from the flag hoisted by the simple rules given, are fully as definite as any probability yet furnished anywhere, and have the merit of applying to the locality of the observer in particular, and not to an indefinite place somewhere within a territory equal to several states. While this constitutes a decided advantage in favor of this system of local flag signals, it is unfortunately true that people generally make much higher demands of the local prognostication than of the much more easily made indications for a great territory.

*Third.* It is of supreme importance that our people should learn to help themselves, and not vainly rely upon a distant power which even at best cannot reach them until too late. Weather telegrams are of greatest possible value, but only as aids to properly organized local work. We should aim to so simplify and systematize this work that every community can secure the advantages of a local signal sufficient

to enable every intelligent person to obtain a fair probability of the coming weather. In fact, any isolated farmer may, by making himself sufficiently familiar with this work, and regularly observing a barometer, and wind, and sky, obtain a better indication of the coming weather than could be telegraphed to him from any far distant place.

As it is advisable to transmit daily some definite instant of time by the telegraph, so it is also very useful to transmit certain meteorological data in this manner, daily, if the means are available; but as it would be very foolish to throw away sun-dial and watch, and to rely on the time being constantly transmitted, so it is equally unwise to neglect the local indications of the barometer, the sky, the wind, and the old and popular signs of sunset, and rely on any distant power to indicate, darkly and in ambiguous, partly contradictory terms, that which we might read with much greater clearness and certainty in the sky, the wind, and the pressure of the air as measured by the barometer.

A faithful record is kept of all signals hoisted at the Central Station. Nearly every storm has been indicated thus far in a reasonable time in advance by the corresponding flag signal.

As soon as we shall have more numerous barometers throughout the state, and observers capable not only of reading the height, but also to understand this reading of the barometer, such weather signals will become more and more numerous throughout our state, and be useful both in giving timely warning and in again causing the people to look into and read the sky.

For further details on this subject I beg leave to refer to the circulars on Flag Signals issued on June 25th and July 5th, and to the proper divisions of the final Weather Reports.

#### CENTRAL OFFICE.

In addition to the different kinds of work carried on at the Central Station of observation, there yet remains a large amount of office-work proper to be done to carry on this service. This office-work consists in the preparation and distribution of *directions* for observers, the reduction, tabulation, mapping, and general study of the station reports for the purposes of permanent record and publication, the printing and publication of blanks, bulletins and reports, the extensive mailing of circulars and publications, and the general correspondence.

The means at the disposal being mainly used for material, printing, and postage, but little remains for clerical help. Still, the general

mailing, including the numbering of station blanks prior to their mailing, the copying of reports for publication, and the office printing of blanks, circular letters and bulletins, has been done by the clerical help at my disposal.

An idea of the amount of work included under these heads may be obtained from the following data, taken from the records:

*Mailing.*—During the ten months from March to December, 1878, there were mailed 397 letters, and 5,519 parcels of printed matter, many of which latter parcels required considerable work in marking, collecting, and folding. The total amount of postage on these letters and parcels, including the stamps on the envelopes sent to the observers for the mailing of their reports, was \$172.47. In the same manner, during the first nine months of 1879, from January to September inclusive, 253 letters have been mailed, and 4,981 parcels of printed matter; total postage sent, \$113.67. Adding hereto for January and February, 1878, the corresponding figures, we obtain for the twenty-one months from January, 1878, to September, 1879, the total of 703 letters, 11,500 parcels of printed matter of all kinds, carrying \$311.14 of postage.

*Office-Printing.*—During the year 1878, this work has been very great. Since the temporary change in postage for electric-pen work, taking effect January, 1879, much less work of this kind has been done. After the restoration of the former rate of postage on this matter, the work having partly changed in the meanwhile, and the time being all required for work on the report now begun, the work of office-printing by electric-pen and duplicating-press was not resumed on so extensive a scale; thereby the expense for paper has diminished, but larger bills for printing have taken its place. Even now, however, a very considerable amount of office-printing proper continues to be done, because the printing of the many blank forms of different kinds would be too expensive for the means of the service. No specified record of office-printing having been kept in 1879, I subjoin merely the list for 1878:

Total number of stencils made .....	166
Total number of copies printed from these stencils.....	44,502
Average number of stencils per month.....	13
Average number of copies printed per month .....	3,700
Average edition of each stencil, about.....	300

Each of these stencils is large quarto, and each printed sheet nine by twelve inches. Quite a number of these stencils are maps, and thirty-six are as many different forms of *blanks*, of which 10,578 copies were printed. Any one familiar with the cost of printing, by ordinary means, blank forms with rules running both vertically and horizontally, thus requiring double justification, will readily appreciate the great saving accomplished by making the thirty-six forms by means of the electric pen and duplicating press. All forms of which not a very large edition is required, continue to be printed in this manner at the office.

The aid rendered in copying station reports for publication, proof reading, revision of observations at the Central Station, and the taking of these observations during my absence, is clerical work which it is impossible to represent by numbers. The drawing of maps, the writing of stencils with the electric pen, and the writing of letters and the study and summarizing of reports from the stations, as well as the writing of the bulletin and reports, has of necessity devolved entirely upon myself. The item of letter-writing has been especially laborious; five hundred and ninety-eight pages quarto in the copy-books testify to this. The other office-work done by me in behalf of this service is already indicated in the first sections of this report, and to a small extent also represented by the quarto volume of *Bulletins*, and the octave volume of *Reports* of the service issued during this biennium. The filing-cases, containing the unpublished material nearly ready for the printer, should also be considered in this connection.

The extent of the data to be studied in preparing these reports may perhaps best be appreciated by the fact that during the four years, over four thousand monthly reports have been received and are systematically filed in this office. Each monthly report contains the observations for at least thirty days, making 120,000 days of observation, and at least 240,000 full observations from the different parts of our State. These figures also demonstrate the fact that the service is accumulating a very notable material of observations for future research.

#### MAGNETIC SURVEY.

By means of instruments furnished by the Coast Survey Office at Washington, a preliminary magnetic survey of Iowa has been made by me, mainly during the months of July and August, 1878. The determination of the declination (commonly called the magnetic vari-



ation) and horizontal intensity has been made at twelve stations, namely: Iowa City, Fairfield, Afton, Council Bluffs, Sioux City, Fort Dodge, Waterloo, Dubuque, Clermont, McGregor, and Decorah, in Iowa, and at Madison, Wisconsin. The last station was selected in order to connect this work with the observations made by the Coast Survey at their permanent magnetic station and underground magnetic observatory in the campus of the of the State University of Wisconsin.

The most important results of this survey are published in the third map of the first plate of the Report for 1878, giving the lines of equal declination. A more complete synopsis of the result was presented at the meeting of the Iowa Academy of Sciences, held at Grinnell, in September, 1878. The most noteworthy fact referred to is the apparent influence of the drainage and river system on the course and distance of these lines. A like influence I detected in the results for north-eastern Missouri, sent me last winter by Professor Nipher of St. Louis. His observations of this season have established the very great effect of the eastern course of the Missouri river on the magnetic declination, which effect I had indicated to him as highly probable on the strength of my own field-work in Iowa, and from my general theory of the origin of the earth's magnetic force.

#### CONCLUSION.

In conclusion it is my pleasant duty to thank the State officers for friendly co-operation on many an occasion; the volunteer observers and their associates for the very extended and often laborious work they have carefully and faithfully done; the press of the state for extensively republishing the monthly Press Bulletin; the crop reporters for enabling us to trace the effect of rain and sunshine on the development of the crops; railroad officers, for diminishing the cost of inspection of stations and the magnetic survey; and all others who in any way may have helped the work of this young service.

If the work is less complete than might be desired it is not on account of lack of energy or labor on my part. While probably seeing the shortcomings and imperfections more clearly than any one else, and regretting their existence, still I am conscious that all has been done that was possible under the circumstances. The time that should have been devoted to rest and recreation has been freely given to the



work of this service; even my researches on various special subjects of physical science have been discontinued to find time to perform the work required for the service.

In the establishment of the Weather Service, our State is the first in the Union. The work and publications of this service have added to the credit of our state abroad. That the work of this service may prove increasingly useful is my earnest endeavor; and that it may continue to be kindly received at home is my hope.

## APPROPRIATION.

The appropriation made in section 4 of the act establishing the Iowa Weather service has been drawn and expended, as shown below by list of warrants, classified synopsis of expenditures, and complete list of individual vouchers sent to the Auditor of State.

## I. STATE WARRANTS RECEIVED.

DATE.	NO. OF VOUCHERS IN RETURN FOR WARRANT ISSUED.	AMOUNT.
1878.		
April 28	Vouchers 1 to 7, inclusive .....	\$ 268 50
July 30	Vouchers 8 to 25, inclusive .....	214 38
Oct. 12	Vouchers 26 to 49, inclusive .....	270 58
1879.		
Jan. 24	Vouchers 50 to 62, inclusive .....	253 80
April 22	Vouchers 63 to 78, inclusive .....	219 41
July 2	Vouchers 79 to 103, inclusive .....	296 03
Sept. 29	Vouchers 104 to 118, inclusive .....	228 20
	Total.....	\$ 1751 40

## II. SYNOPSIS OF EXPENDITURES.

Postage: 15900 stamps, and 3500 cards* .....	\$ 320 00
Publication, blanks and cuts .....	634 78
Inspection, including magnetic survey.....	137 22
Clerk-hire. ....	420 00
All other expenditures .....	239 40
Total.....	\$ 1751 40

\* This includes, of course, the stamps on stamped envelopes, and the cards, sent to observers for report to Central Station.

III. LIST OF VOUCHERS.

DATE.	PERSON.	OBJECT.	Number.	AMOUNT.
1878.				
March 16	G. Hinrichs.	d February, 1878.	18	195 00
March 16	Levytype Co., Philadelphia.	.....	2	4 00
March 16	Photoelectrotype Co., Boston.	.....	3	5 25
March 18	B. Owen, P. M.	.....	4	25 00
March 20	B. Owen, P. M.	.....	5	16 00
March 28	J. P. Irish.	.....	6	16 25
March 28	Wilson, Rodgers & Shields	.....	7	7 00
April 1	G. Hinrichs, Jr.	.....	8	20 00
April 1	B. Owen, P. M.	.....	10	1 00
April 20	Mrs. J. G. Fink	.....	11	40 83
April 20	B. Owen, P. M.	.....	12	9 00
April 22	Barnhart Bros. & Spindler, Chicago	er symbols.	13	15 00
April 26	J. R. Holcomb & Co	.....	14	5 20
April 27	B. Owen, P. M.	.....	15	10 00
April 27	James Lee.	.....	16	31 00
April 29	Price & Schell.	.....	17	3 60
May 3	McDonald & Johnson, Chicago.	.....	18	5 00
May 6	J. R. Holcomb & Co.	.....	19	6 00
May 9	Barnhart Bros. & Spindler, Chicago	er symbols.	20	30 00
June 5	B. Owen, P. M.	.....	21	10 00
June 7	B. Owen, P. M.	.....	22	15 00
June 10	Barnhart Bros. & Spindler, Chicago	pes	23	5 50
June 15	McDonald & Johnson, Chicago.	.....	24	5 00
June 17	Photoelectrotype Co., Boston.	.....	25	2 75
July 8	J. P. Irish.	.....	26	4 75
July 8	Mrs. J. G. Fink	.....	27	15 40
July 8	B. Owen, P. M.	.....	28	1 00
July 10	B. Owen, P. M.	.....	29	10 00

## LIST OF VOUCHERS—CONTINUED.

DATE.	PERSON.	OBJECT.	Number.	AMOUNT.
187				
July	August 23 United States Express Co.	Expressage	30	30
July	August 23 B. Owen, P. M.	Paper for blanks	31	4 50
July	Sept. 4 G. Hinrichs	Book paper	32	1 56
July	Sept. 28 C., R. L. & P. R. R. Co.	Expressage	33	40
July	Oct. 1 B. Owen, P. M.	May, and June	34	60 00
July	Oct. 3 B. Owen, P. M.	c survey.	35	11 25
July	Oct. 22 Mrs J. G. Fink	etc.	36	1 80
July	Oct. 23 James Lee	Straps for tent	37	1 00
July	Oct. 26 Geo. H. Bliss, Chicago.	Wrapper for tent	38	90
July	Oct. 28 Keuffel & Esser, New York.	Expressage, tent to Clermont	39	80
July	Nov. 9 Culver, Page, Hoyne & Co., Chicago.	Travel to Clermont and back	40	10 90
Augu	Nov. 9 B. Owen, P. M.	Printing 1000 reports, 1877	41	40 00
Augu	Nov. 12 United States Express Co.	1200 stamps	42	20 00
Augu	Nov. 16 American Express Co.		43	80
Augu	Nov. 20 B. Owen, P. M.	lays	44	30 52
August 23			45	2 60
August 23			46	10 00
Sept.		lays	47	39 65
Sept.		on Des Moines	48	1 45
Oct.			49	1 00
Oct.			50	5 00
Oct.		aper	51	29 65
Oct.		lc.	52	30 25
Oct.		aper	53	22 80
Nov.		irts	54	7 65
Nov.			55	18 50
Nov.		ument to Washington	56	10 00
Nov.		icago	57	3 40
Nov.			58	2 15
Nov.			59	20 00

Dec.	2	G. Hinrichs, Jr.	60	80 00
Dec.	5	Culver, Page, Hoyne & Co., Chicago	61	14 40
Dec.	11	B. Owen, P. M.	62	15 00
Dec.	24	Keuffel & Esser, New York	63	30 00
Dec.	31	G. Hinrichs.	64	2 70
1879.				
Jan.	9	J. R. Holcomb	65	3 20
Jan.	25	B. Owen, P. M.	66	10 00
Jan.	25	Mrs. J. G. Fink	67	10 56
Jan.	30	James Lee	68	33 70
Feb.	10	United States Express Co.	69	75
Feb.	15	J. P. Irish	70	6 00
Feb.	15	Iowa City Republican	71	9 50
Feb.	23	B. Owen, P. M.	72	5 00
March	6	G. Hinrichs, Jr.	73	60 00
March	10	B. Owen, P. M.	74	5 00
March	21	Slissfield, Lorsch & Co., New York	75	30 00
March	31	Tiffany & Co., New York	76	5 00
April	5	B. Owen, P. M.	77	5 00
April	18	G. Hinrichs	78	3 00
April	19	B. Owen, P. M.	79	5 00
April	21	United States Express Co.	80	2 80
April	24	B. Owen, P. M.	81	10 00
April	26	W. Hohenschuh	82	8 00
April	26	J. P. Irish	83	4 75
April	28	B. Owen, P. M.	84	10 00
May	5	United States Express Co.	85	1 00
May	7	B. Owen, P. M.	86	15 00
May	10	J. P. Irish	87	3 00
May	12	G. Hinrichs, Jr.	88	60 00
May	12	graph Co.	89	2 55
May	14	n.	90	2 00
May	14	ils.	91	18 00
May	21	G. Hinrichs	92	23 00
May	24	Mills & Co., Des Moines.	93	14 00
May	24	Clarkson Bros., Des Moines	94	9 00
June	2	Mrs. J. G. Fink	95	25 78
		ulars.		
		December, January		
		March, April.		
		return		
		ps.		
		t, September, and October		

## LIST OF VOUCHERS—CONTINUED.

DATE.	PERSON.	OBJECT.	Number.	AMOUNT.
1878.				
June 6	Photo-electrotype Co., Boston	Photo-electrotypes	96	\$ 17 60
June 6	B. Owen, P. M.	500 stamps	97	5 00
June 16	B. Owen, P. M.	500 stamps	98	15 00
June 23	James Lee	Binding and stationery	99	9 80
June 25	G. Hinrichs	Expenses for signal flags, etc.	100	8 00
June 27	J. P. Irish	Printing	101	14 25
June 27	B. Owen, P. M.	400 stamps	102	10 00
June 27	G. Hinrichs	Petty expenses	103	2 40
July 7	B. Owen, P. M.	500 stamps	104	5 00
July 19	J. P. Irish	Printing	105	9 25
July 23	Culver, Page, Hoyne & Co., Chicago	Filing-cases	106	13 50
August 4	B. Owen, P. M.	500 stamps	107	5 00
August 9	Wilson, Rodgers & Shields	Printing	108	10 25
August 11	B. Owen, P. M.		109	5 00
August 12	Photo-electrotype Co., Boston		110	28 00
August 22	B. Westermann & Co., New York	Drechsler Witterung zu Dresden	111	3 80
August 25	B. Owen, P. M.	300 stamps	112	5 00
Sept. 3	G. Hinrichs, Jr.	Clerk hire—May, June, July and August	113	80 00
Sept. 9	B. Owen, P. M.	400 stamps	114	5 00
Sept. 19	J. P. Irish	Printing	115	10 00
Sept. 19	Mills & Co., Des Moines	Printing	116	28 20
Sept. 23	Mrs. J. G. Fink	Stationery	117	14 70
Sept. 23	G. Hinrichs	Petty expenses	118	4 85
	Total			\$ 1751 40

**REPORT**  
**OF**  
**COMMITTEE ON ELECTIONS**

**IN THE CASE OF**

**BULL VERSUS HENDERSON**

**For a Seat in the Senate, from the 27th Senatorial  
District.**

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**[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]**

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**DES MOINES:**  
**F. M. MILLS, STATE PRINTER.**  
**1880.**





SENATOR Hartshorn, from the Committee on Elections, submitted the following report:

MR. PRESIDENT: Your Committee on Elections to whom was referred the contest of J. W. Bull vs. John W. Henderson for a seat in this Senate from the 27th Senatorial District, beg leave to report that they have had the same under consideration and have unanimously instructed me to report to the Senate an abstract of the issues, statement of facts and legal conclusions, accompanied by the resolution herewith submitted.

E. J. HARTSHORN, *Chairman.*



In the Senate of the Eighteenth General Assembly  
of the State of Iowa.

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J. W. BULL,  
                    *Contestant,*  
                    *vs.*  
JOHN W. HENDERSON,  
                    *Incumbent.* }

ABSTRACT OF ISSUES.

CONTESTANT claims his election to the office of Senator for the 27th Senatorial District on the grounds:

1. That by the face of the returns the incumbent received a majority of 24 votes.

2. That in fact the vote of Marion township was for incumbent 371 votes and for contestant 527 votes, but that the return made by the canvassers gave to incumbent 402 votes and to contestant 488 votes, by which incorrect count and return contestant was deprived of 39 votes, 31 of which have been given to the incumbent; and that there were sundry irregularities practiced which authorize the setting aside of the returns as follows:

(a) That persons not judges or clerks were permitted to assist in the count.

(b) That the canvassing board adjourned pending the canvass.

(c) That the ballots were not securely or safely kept, so as to avoid the possibility of fraud.

He further claims that 35 ballots cast for him were, in fact, taken from the box pending the canvass and the same number substituted for incumbent.

Incumbent admits the adjournment and alleges its necessity. Denies fraud or opportunity for fraud in the count and in general denies all facts showing an incorrect, irregular or fraudulent canvass and return.

3. Contestant claims that votes cast for persons other than incum-

bent were counted for him sufficient in number to change the result, which incumbent denies.

4. Contestant claims that more than enough illegal ballots were cast to change the result which is denied.

5. That in Rapids township is the city of Cedar Rapids, containing more than 6,000 inhabitants;

That the township is divided into six precincts, the First, Third, Fifth and Sixth of which are wholly in the city, and the Second and Fourth of which comprise portions of the city and territory outside the city;

That the streets of the city are named and the houses numbered; and that in said precincts illegal votes were received and irregularities practised as follows :

(a) In the First precinct 130 votes were received from persons whose names were not registered, of which 90 were cast for the incumbent;

(b) In the Second precinct 129 such votes were cast, of which 72 were cast for incumbent;

(c) In the Third precinct 70 such votes were cast, of which 52 were cast for incumbent;

(d) In the Fourth precinct 94 such votes were cast, of which 52 were cast for incumbent;

(e) In the Fifth precinct 29 such votes were cast, of which 16 were cast for incumbent;

(f) In the Sixth precinct 15 such votes were cast, of which 9 were for incumbent; making in all 467 such votes, of which 291 were for incumbent, being a majority of 115 votes so cast;

That of the 176 remaining votes contestant cannot say whether they were cast for him or not because of the fact that incumbent's name was printed upon certain tickets purporting to be "regular" Republican tickets, whereby voters were deceived and confused;

That none of such unregistered voters whose ballots were cast for contestant complied with the law by filing affidavits;

(g) Giving sufficient excuse for not registering;

(h) Or affidavit of free-holder;

(i) Or giving street and number of residence;

(j) And that affidavits were made by persons not residents of the township;

(k) And the affidavits filed were insufficient, informal and fraudulent;

The incumbent in general denies all the material facts in relation to the votes of non-registered voters, and on the other hand claims that such votes, if illegal, were not cast for him as alleged;

That the contestant likewise published tickets of such character as to deceive the voters and that the same were used at the various precincts.

Incumbent, in addition to his denials, claims:

6. That 6 votes were in fact cast for him but counted for other persons by the County Board of Canvassers, said votes being intended for incumbent, he being a regular candidate and the only one of that name, which would increase his vote to 3462.

7. That 268 illegal votes were cast and counted for contestant by the Board of Canvassers, and that a large number of votes in fact cast and intended for other persons were by said Board counted for contestant.

8. That in the Third precinct of Rapids township 148 votes were cast for contestant and 278 votes were cast for incumbent, and the return and canvass was, for contestant, 151 votes, and for incumbent, 276 votes.

9. That in the Second precinct of Rapids township, after the polls were closed, the judges allowed and procured one W. W. Smith to handle and arrange the ballots and the votes were in fact canvassed by him, he not having been sworn, nor a judge of election and that less votes were counted and returned for him, and more for incumbent, than were in fact cast.

The contestant is deemed to have denied all material affirmative claims made by the answer.

THE FACTS RELATING TO THE CANVASS OF THE VOTES IN MARION TOWNSHIP ARE AS FOLLOWS:

Two ballot-boxes were used. One for the voters inside the city limits, the other for voters residing in the township but outside the city limits.

Upon closing the polls, and before the boxes were opened, it was proposed by various parties interested in the result as to certain candidates, that the ballots should be examined and the result in which such interest was felt ascertained.

The judges thereupon consented that one member should be selected from each of the political parties, who might in the presence of the

judges examine the ballots and ascertain the result for themselves. One Republican, one Democrat and one Greenbacker were selected as such committee. By the consent of the judges, and agreement of the committee, one Crawford was permitted to assist in the proceedings.

The ballot-boxes were placed upon a table, about ten feet long and four feet wide. One of the judges sitting opposite, near to each box, the other judge standing at the end of the table.

The clerks took no part, but were present most of the time during the count by committee. Other persons were present, as was also a constable, and there was no unusual noise, confusion or disturbance. The committee and their assistant sat in the ordinary position on each side of the table. Two lamps were placed upon the table:

One of the judges took from the box a number of ballots, varying from twenty to fifty, partially arranged, and passed them to a member of the committee, who, with the assistance of another member sitting by him, completed the arrangement into parcels of "straight Republican," "straight Democrat" and "mixed" tickets. The number in each package was counted, the package handed to the other judge sitting by the box, who marked on the back of the last ticket the number contained in the package, and the kind of tickets in package, placed a rubber band around it and kept it in his immediate possession upon the table before him until the box was emptied, when it was replaced in the ballot-box. When all the tickets had been thus arranged, they were again taken from the box, the count in each package verified by the committee, announced to two of them acting as tellers, handed back to the judges and replaced in the box.

The mixed tickets were called separately so far down as the township ticket.

The straight tickets were counted by the number appearing to be contained in each package.

The offices in which particular interest was felt were Congressman, State Senator, Representatives, and some of the county officers.

Informal tally lists were kept by the committee, the footings of which are as follows:

NAME.		Outside of City.	City.	Total.	Ma- jority.
Thompson	} Congress.	835	369	704	505
Calhoun		122	77	199	
Bull	} State Senator.	287	242	529	156
Henderson		210	163	373	
Stephens	} Representative.	264	278	542	219
Armstrong		182	141	323	
Brown	} Representative.	264	249	513	190
Terry		168	131	299	
Jackson	} County treasurer.	250	290	540	218
Oxley		206	116	322	
Yambert	} Sheriff.	156	147	303	
Lyman		16	14	30	

This result was thought by the committee to be correct.

The judges took no part further than to prevent any abstraction or change of ballots and did not attempt to ascertain for themselves the state of the vote.

The count lasted until about 11 o'clock P. M. when the committee completed the tally-list and announced the result. The judges replaced all the ballots in the boxes which were not locked, but sealed with paper and mucilage, three strips extending over the opening of the box and the joint of the lid, thereby preventing any opening of the box or change of ballots except by the breaking of the seals.

The boxes were then taken by the judges to an unused vault in the court-house where the election was held, placed therein, the ventilator closed and secured, the vault locked with a key furnished by the auditor of the county, who directed the mode of locking.

The windows in the room leading to vault were fastened down, the door to the room locked and the judges separated.

On the morning of the next day the judges together went to the vault, found all the fastenings apparently as they had been left, examined the seals upon the boxes sufficiently to satisfy themselves that they had not been disturbed, took the boxes to the room where the election had been held and publicly proceeded to count the ballots.

Four of the five judges and clerks of election were Republicans and

voted for contestant. Not having finished the count that night they again sealed the boxes, containing all the ballots, placed them in the vault and secured the doors as before, and separated until the next morning, when the doors, fastenings and seals did not appear to be disturbed or to have been tampered with, then proceeded to finish the count in the same place where the election was held and certified the result on the poll books as follows:

OFFICE.		Rep.	Dem	Scat- tering	Total
Thompson	Congress.....	690			
Calhoun			201		
Byington				1	893
Bull	State Senator.	488			
Henderson			402		890
Stephens	Representative.	504			
Armstrong			349		853
Brown	Representative.	479			
Terry			333		812
Melbourne	Representative.			36	
Lyman				32	70
Daniels	County Auditor.....	538			
Fitzgerald			321		
Young				1	860

During the count by the committee there was a question between the tellers as to the correctness of the count, which was settled in some way and the count proceeded.

The attention of the committee was also called to the fact that certain ballots, apparently Republican throughout, contained the name of the incumbent instead of the contestant for the office of State Senator. The contestant being the regular Republican candidate and the ballots denominated *straight* Republican supposed to contain his name.

Upon the count by the judges a number of ballots of this kind were found among the packages marked and counted by committee as *straight* Republican.

In the canvass the Judges counted for the incumbent: 26 votes for J. W. Henderson, 1 for J. N. Henderson, 2 for Henderson only, and 3



for John Henderson. Six of these votes were rejected by the Board of Supervisors. No candidate of the name of Henderson was voted for except for the office of State Senator, and no candidate of that name was known to the public on the day of election, except the incumbent, and concerning his election there was much interest.

During the count by the committee the judges had no reason to suspect any attempt to commit fraud by change of ballots or otherwise, but in fact used a good degree of caution to prevent the possibility of such act. In the adjournment and sealing of the boxes and placing them in the vault they acted in the same manner.

In that precinct it had been the custom to adjourn the count by the Judges until the day after the election, and to allow, as in this case, the preceding count by a committee composed of members of the several political parties.

THE FACTS AS TO THE VOTE IN RAPIDS TOWNSHIP ARE AS FOLLOWS :

The township is divided into six (6) election precincts, designated by number.

The 1st, 3d, 5th and 6th, of which are wholly within the limits of the city of Cedar Rapids. The 2d and 4th of which are each made up of territory both within and without the city limits.

The township contains a population as shown by the last census of more than 6,000 inhabitants.

The streets of the city are named and the houses in general numbered, and the residence of citizens are generally known by reference to such named streets and numbers.

The township trustees on the 8th day of October, acting as a board of registry certified to a register of electors in each of the several precincts which several registers were used by the judges of election.

The registers contained the names of voters alphabetically arranged, in some cases in full length, and others giving the initials only of the name.

In no case was the residence of any elector indicated in any manner except by the certificate of the trustees which stated the lists to be a true and correct register of electors in the election precinct as far as the same had come to their knowledge.

The judges of election received the ballots offered by all persons whose names appeared on the registers and added to the registers severally as follows:

In the 1st precinct.....	134
In the 2d precinct.....	132
In the 3d precinct.....	71
In the 4th precinct.....	95
In the 5th precinct.....	28
In the 6th precinct.....	15
Total.....	475

In the third precinct 12 votes were received and names added to the register without furnishing any affidavit of excuse, or voucher.

The other electors whose ballots were received furnished affidavits in attempted compliance with the law.

The excuses rendered were as follows:

First year in ward.....	1
Absent .....	11
No reason given.....	35
Registered in another ward.....	14
Neglect.....	179
Ignorance .....	14
Omitted in making up register.....	4
Not naturalized in time .....	2
Supposed they were registered.....	120
Overlooked it.....	40
Not time.....	4
Did not know it was necessary.....	30
Sick .....	3
Initials wrong.....	1
Mistake.....	5
Total.....	463

In 35 cases no reason whatever is given for not appearing before the Board of Registry.

Seventy-two electors were vouched for by persons whose names did not appear upon the register.

The vouchers made affidavit that they were householders in 336 cases.

That they were freeholders in 62 cases.

That they were property-holders in 41 cases.

In 24 cases the affidavits were left entirely blank in regard to whether they were free or householders.

In no case did the affidavit of the voucher give the residence of the elector, or of the voucher, except in the general statement that the elector was a resident of the precinct wherein the vote was offered.

In no case did any of the affidavits give the number of the precinct where the vote was offered.

Three hundred and thirty-two of the affidavits state the elector lived six months in the state and sixty days in the county, omitting to state residence in election precinct.

One hundred and thirty-one of the affidavits state the elector has resided in the county 60 days, and that he is an actual resident of the precinct wherein he offers his vote, omitting the length of time he has resided in the state.

Fifty-four of the affidavits were not signed by the electors, but the jurats of the officers are regular, certifying that said affiants were duly sworn.

One, W. W. Smith, was allowed to assist in counting the ballots in second ward, in which the majority returned for incumbent was 53, but there is no evidence of any actual fraud.

For the incumbent there were 5 votes cast that were illegal in fact, on other grounds than those relating to the affidavit.

For the contestant there were 3 votes illegal in fact, on other grounds than those relating to the affidavit.

Of the unregistered voters who furnished no affidavit, but whose names were put on by the judges on the day of election, 4 voted for incumbent and 1 for contestant.

Of the unregistered voters furnishing affidavits, 35 voted for incumbent and 27 for contestant.

The evidence does not show for whom the other unregistered voters cast their ballots.

Nine affidavits were made by vouchers not residents of the precinct.

There were many tickets of various kinds in circulation at the several election precincts, and the name of incumbent was in many cases printed or written upon tickets otherwise Republican, and it was well understood that the incumbent and contestant were the only candidates for the office of State Senator, and that such tickets were in circulation, and that incumbent was an independent candidate and soliciting votes from all parties.

One vote cast in Mt. Vernon precinct, for which the candidate was named "Bull," without initials, was not counted for contestant by the Board.

No other candidate by the name of Bull was known to the public on the day of election.

Stated more briefly the facts are :

1. A register of voters is required in Rapids township.
2. The register was duly certified for each of the six precincts and was defective in that the particular residence of no elector was given.
3. There is no proof that any voter knew of any defect in the register.
4. Twelve votes were received by the judges without any affidavit. Of these contestant received 1 and incumbent 4, and for whom the others voted is not shown.
5. Of the illegal votes, on other grounds than those relating to registry, contestant received 3, incumbent 5.
6. Of the unregistered votes contestant received 27, incumbent 35, and the remainder of the unregistered votes are not accounted for—no evidence being offered or satisfactory reason shown why the proof was not produced.
7. There is no evidence of any gross fraud practiced at any of the precincts, nor of any deceit used by the parties or their adherents, of any character which would affect results.

8. The defects in affidavits of electors are classified thus :

Defect in statement of residence in State.....	131
Defect in statement of residence in election precinct .....	332
Defect in statement of street and number and particular place of residence.....	463
Failure to sign affidavit.....	54
Failure to state any excuse.....	35
Those giving a sufficient excuse.....	21
Those giving an insufficient excuse.....	267
Those giving a doubtful excuse.....	140

#### DEFECTS IN AFFIDAVITS OF VOUCHER.

Defect in failing to state whether free or householder.....	24
In stating they were property-holders.....	41
In vouching for electors when not registered themselves.....	72
In failure to state the street and number, and particular place of elector's residence.....	463

The result would stand thus upon the count of the votes proven to be illegal:

Incumbent's majority.....	24
Add votes in Marion township thrown out .....	6
	—
	30
Deduct from this illegal for want of registry.....	4
Illegal for want of any affidavit.....	5
Illegal vote for contestant in Mt. Vernon precinct.....	1
	—
	20
Add to this votes illegal for want of registry cast for contestant..	1
Votes illegal for want of any affidavit.....	3
	—
	24

If the other votes unregistered, and proven to have been cast for the parties are considered illegal, the result will stand:

Votes cast for incumbent.....	35
Votes cast for contestant.....	27
Incumbent's loss.....	8
	—
Which leaves his majority.....	16

#### LEGAL CONCLUSIONS.

From the foregoing statement of facts your committee might report their conclusions without entering into any argument or statement of the law.

But the case has been presented with so much ability and pertinacity on both sides, and is of such general importance that a brief statement of the law seems to be necessary.

#### I.

##### AS TO THE MARION TOWNSHIP VOTE.

The judges did not proceed to canvass the votes in this township after closing the polls, but adjourned the canvass until the next day, and in the meantime permitted a committee of private citizens representing the different political parties to run over the tickets and make an informal count as to certain offices including the office of State Senator.

After this was done the board returned the ballots to the boxes, sealed the boxes and then deposited them in the vault at the courthouse, locked the vault door, and one of the judges took the key and the boxes were permitted to remain in the vault until the next morning, when they commenced their official count. In the evening of that day, not having finished the canvass, they adjourned until the next day and sealed and deposited the ballot-boxes in the vault as before until the next morning.

It is claimed by the contestant that these irregularities on the part of the board tended to destroy the sanctity of the ballot-box and rendered the official count of no validity in fact.

The conduct of the judges of election in this precinct in allowing the ballots to be handled by private citizens, either as a matter of curiosity or for partisan purposes, cannot be too strongly condemned.

The purity of the ballot-box is so essential to our form of government that it ought not under any circumstances to be subject to suspicion, and suspicion will arise in all cases where the ballots are allowed to pass into the hands of private persons to be counted, if their count differs from the official count. The evidence in this case however shows that these judges of election were in main partisan friends, and ardent supporters of the contestant.

It is conceded that they are honest men and acted in good faith. They say that they were vigilant and exercised all reasonable care in watching the ballots while they were being counted by the committee. They were in a position to know, and they have testified that there was no tampering with the ballots; and that they are satisfied that the ballots were under their observation all the time, and that the identical ballots taken out were returned to the boxes. While, therefore, the conduct of the judges in permitting the ballots to be handled by private citizens was a clear violation of their duty, and necessarily cast suspicion upon the purity of the ballot-box, it seems clear that this irregularity cannot of itself prevail to deprive the electors of their votes or defeat the regular count of the board when made.

*Sec. 622 of the Code* provides that "When the poll is closed the judges of election shall proceed to canvass and ascertain the result of the election."

This provision of our statute is evidently only directory and unless some prejudice results from the adjournment it would not invalidate the canvass.

The vital question in all such cases is as to the care and prudence

exercised by the board to guard against fraud and protect the purity of the ballot-box during the adjournment.

If the box is left in some public place, or in such exposed condition that it could readily be tampered with, the presumption will prevail that it *has* been tampered with, and the ballots in the box will not be regarded as the best evidence of the voice of the people; but if the ballot-box has been safely guarded and securely kept during the adjournment it will be presumed to contain the actual ballots of the electors, and the official count of such ballots will be the best evidence of the result of such election.

That the board exercised due diligence and proper care to protect the ballot-boxes during the several adjournments in this case is clearly shown by the evidence.

Irregularities of the character complained of will not cause the ballots to be rejected, or the canvass and return thereof to be set aside unless accompanied by proof tending to show that such ballots and returns were incorrect and did not indicate the true result of the election.

*Fry v. Booth*, 19 Ohio, 25.

*People v. Holden*, 28 Cal., 123.

*People v. Cook*, 8 N. Y., 67.

*The Board of Supervisors, etc., v. The People, etc., Ex Rel. Willard Scott*, 65 Ill., 360.

Inasmuch as the count of the committee would have elected the contestant it is quite natural that he should think it correct. There is no question but that the board correctly canvassed the votes in the ballot-box; and hence the contestant thinks that the ballot-box was opened by some one in some way, and the ballots exchanged sufficient to cover the discrepancy in the count.

There is, however, no evidence to support this theory, and it is much more reasonable to suppose that the "committee" made a mistake in assorting, bunching, or labeling the tickets.

The evidence shows that the "committee" did "bunch" Republican tickets with Henderson's name on, with straight Republican tickets.

The count of the "committee" was very unreliable. Neither member of that committee had within himself evidence of its correctness. The tickets were examined for the purpose of bunching the straight tickets.

None of these were called off. The kind of ticket and number was marked on the back. The official count shows a gain of 29 for incumbent and a loss of 41 for contestant over the count of the "committee." So the mistake must have occurred in "bunching" and marking the tickets. Some bunch of "scratched" tickets was marked as "straight."

As a fact conclusion we therefore find that the count of the "committee" was incorrect; that there was no change of ballots in the box, and that the judges of election, in fact, counted and made their returns of the identical ballots cast by the electors.

Inasmuch as there was but one person of the name of Henderson in the field as a candidate for Senator, it is fair to presume that the six votes cast for John Henderson, Henderson, etc., were intended to be cast for incumbent. These votes should be given him, and the canvass corrected in this respect.

McCrary on Elections, 297.

## II.

It is conceded that the registry law applies to the city of Cedar Rapids, and that four hundred and seventy-five persons voted at the election whose names were not on the registers.

The statute of this State in relation to registration provides that "The judges in election precincts, where the registry law is in force, shall designate one of their number to check on the register the name of every person voting, and no vote shall be received from any person whose name does not appear there unless he shall furnish the judges his affidavit, showing that he is a qualified elector, and a sufficient reason for not appearing before the board on the day for correcting the register, and also shall prove by the affidavit of one free-holder or householder whose name is on the register that such affiant knows him to be a resident of that election precinct, giving his residence by street and number if in a city or incorporated town, as the same is in such cases required to appear on the register. \* \* \*"

Sec. 618 of Code.

*Twelve* of the persons so voting whose names were not on the registers filed no affidavits or vouchers whatever. The other *four hundred and sixty-three* attempted to comply with the law but their affidavits and proof are all more or less defective in some essential particular.



It will be observed that the law requires the voter to show by his own affidavit two things:

1. That he is a qualified elector.
2. A sufficient reason for not being registered.

The Constitution of this State, section 1, article 2, provides that, "Every male citizen of the United States of the age of twenty-one years, who shall be a resident of the state six months next preceding the election, and of the county in which he claims his vote sixty days, shall be entitled to vote at all elections which are now, or hereafter may be authorized by law."

The statute of this state, Sec. 605, of the Code, further provides that, "No person shall vote in any other precinct than that in which he resides at the time."

*Three hundred and thirty-two* of the persons so voting failed to show by their affidavits that they were residents of the precinct in which they voted.

*One hundred and thirty-one* of them failed to show by their affidavits that they had resided in the state six months next preceding the election.

*One hundred and seventy-nine* of these voters say in their affidavits that they failed to register on account of "*neglect*," and no reason whatever is given in *thirty-five* cases. In fact but very few of the affidavits show any sufficient reason for not registering.

The supporting affidavits are equally defective.

These affidavits are required to be made by a householder or freeholder whose name is on the register and must state that affiant knows the person offering his vote to be a resident of that precinct, giving his residence by street and number.

*Seventy-two* of these affidavits were made by persons whose names were not on the registers themselves.

In *sixty-five* cases the affidavits do not show that they were made by householders or free-holders.

*None* of the affidavits give the residence of the voter by street or number, or in any other manner except the general statement of residence in precinct.

It is conceded that the registry law is not in conflict with the Constitution because it does not "prescribe any new qualifications for voters but only new formalities to be observed by those possessing the constitutional qualifications." In other words, it does not take away the right of any man to vote but imposes on the voter such reasonable

conditions as in the judgment of the General Assembly are necessary to protect the purity of the ballot-box.

It therefore only becomes necessary to determine the proper construction of this law.

The incumbent insists that the judges of election have a discretionary power under the law in passing upon the affidavits and receiving the votes of non-registered electors and that no vote received by them can be thrown out, and not counted, on account of the insufficiency of the affidavits.

The statute seems to be imperative. "No vote shall be received from any person whose name does not appear there unless," etc. . *This amounts to a prohibition.* It is not discretionary. It is compulsory.

The statute imperatively commands the judges of election not to receive any ballot offered by an elector whose name is not on the register unless he shall *comply* with the law. If the judges of election in open violation of the law receive such ballots as they are commanded not to receive, it would render the law nugatory to say that such ballots can not be thrown out but must be counted. If the elector does not attend and see to having his name put on the register he cannot vote unless he shall comply with the law in all its essential particulars in regard to affidavit and proof. This he must attend to at his peril, and if he fails to do it his vote cannot be lawfully received, and if the judges of election in violation of law do receive it and deposit it in the ballot box it cannot be counted but must be rejected.

This seems to be the settled law of the land.

*In re Duffy*, 4 Brewster, 542, Harding, P. J., in giving the opinion of the court said:

"The third section of the act of 1869, provides in mandatory terms," that "no man shall be permitted to vote at the election \* \* \* \* whose name is not on said list, unless he shall make proof of his right as hereinafter required."

How is the proof to be made?

This is a vital question.

It is not for the officers of an election board to decide how; the statute does that.

In *Doerflinger v. Hilmantel*, 21 Wis., 570, Dixon, Judge, in delivering the opinion of the court on the construction of a statute exactly similar to ours, said: "It is essentially an imperative statute and deprives the inspectors of all jurisdiction to receive the votes of unregistered voters, unless the conditions as to the affidavit and oath are fully

complied with \* \* \* \* \*. In this matter of a voter whose name has been omitted and who has not appeared on the day for the correction of the register, the burden of answering the requirements of the law by furnishing the affidavit and proof, is thrown upon the voter himself. He is presumed to know the law and must go to the polls prepared to comply with its conditions; and if he does not, and his vote is lost, it may, so far as it is the fault of anyone, with justice be said to be his own fault. It is in the nature of a penalty imposed by the law for his neglect to do what is required of him. The inspectors cannot receive his vote, and if they cannot, it cannot afterward be received and counted by the court."

In *Nefzger v. The D. & St. P. R. R. et al.*, 36 Iowa, 642, the Supreme Court of this state cite the above authority with approval, and lay down the rule "that no legal election can be held in this State where the registry law is in force, without registration."

See also as bearing on this same subject:

*The People v. Pease*, 27 N. Y., 45.

*Capen v. Fisher et al.*, 12 Pick., 485.

*The People v. Kopplekom*, 16 Mich., 342.

*State v. Albin*, 44 Mo., 306.

We are therefore of the opinion that the 475 votes referred to are illegal and void.

By section 7, article 3, of the Constitution: "Each house shall \* \* \* judge of the qualification, election and return of its own members."

In *People v. Vail*, 20 Wend., Bronson, Judge, says: "In those legislative bodies which have the power to judge of their own members, it is the settled practice, when the right of the sitting member is called in question, to look beyond the certificate of the returning officer \* \* and inquire into and ascertain the abstract question of right."

The Senate is therefore a court of inquiry to ascertain and determine who has, in fact, received the greatest number of legal votes cast in that district for the office of Senator.

The evidence discloses the fact that five of the twelve persons voting who were not registered and filed no affidavits, voted for incumbent, and one for contestant. That of the unregistered voters who made and filed affidavits, thirty-five voted for incumbent and twenty-seven for contestant. There is no evidence tending to show who the other four hundred and eight illegal votes were cast for.

After crediting each party with such additional votes as they are entitled to, not given them by the board of canvassers, and deducting such illegal votes as the evidence shows were cast for each of the parties, the incumbent's majority is reduced to 16 votes.

Hence it is impossible to determine from the evidence before the committee, *who* has, in fact, received a majority of the legal votes cast for Senator in that district.

The burden of proof is upon the contestant to establish his right to the seat. This could only be done by showing that he received a majority of the legal votes cast. He has not done this, and hence has failed to establish his case.

It is shown, however, that more than enough illegal votes were cast to overcome the majority of incumbent and change the result of the election. Under this showing the incumbent was required to account for the illegal vote and show that if the polls were purged of it, he would still have a majority of the legal votes, and be rightfully entitled to the seat. This he has failed to do.

The committee might ask power to take testimony for the purpose of determining for whom these illegal votes were cast, but in view of the fact that the parties have neglected to take such testimony themselves although they have had ample time and opportunity to do it, both before and since the case was referred to the committee, we have concluded that it would be impracticable. Under these circumstances what is to be done? The contestant claims that the poll should be purged of the illegal votes in each precinct by dividing the illegal votes between the parties in proportion to the whole vote received by each.

Incumbent's right to the seat is forfeited because it is impossible to determine who was elected on account of the presence of this large illegal vote, so greatly in excess of his majority.

Now, if you divide the illegal votes between the parties, you are as much in doubt about the election as you were before. Such division is a mere guess on an equitable basis, but it has been adopted in a few cases where it would work great public inconvenience to declare the office vacant.

It is, however, of doubtful propriety in any case, because it has no certainty of right or justice in it, and it should never be adopted by any court or tribunal having the power to order a new election.

McCrary on Elections, in speaking of this mode of division, Sec. 299, says: "This is probably the safest rule that can be adopted in a court of justice where there is no power to order a new election and when great injury would result from declaring the office vacant; but it is manifest that it may sometimes work a great hardship inasmuch as the truth might be, if it could be shown, that all the illegal votes were cast on one side, while it is scarcely to be presumed that they would ever be divided between the candidates in exact proportion to the whole vote. \* \* \* \*

"In a legislative body having power to order a new election and in any other tribunal having the same power, it will doubtless generally be regarded as safer and more conducive to the ends of justice to order such new election, than to reach a result by the application of the rule above stated. \* \* \* And it is clear also that when in such case no great public inconvenience would result from declaring the election void and seeking a decision by an appeal to the electors, that course should be adopted."

*In Ex parte Heath et al.*, 3 Hill, 43, it is held, that if the illegal votes cast would change the result, and it is impossible to ascertain for whom they were cast, a new election may be ordered.

See also *Ex part Murphy*, 7 Cow., 153.

In commenting on this case McCrary in his work on Elections in Section 269 says:

"An election may be set aside, declared void and a new election ordered upon the introduction of such proof as renders it impossible to determine who has been chosen by a fair majority; but the contestant can in no case be declared entitled to the office until he shows affirmatively that he has received a majority of the legal votes cast."

It is well settled, therefore, both upon principle and authority that in a case of this kind where the illegal votes cast are sufficient to change the result, and it is impossible to ascertain for whom they were cast, that the seat should be declared vacant.

The duly qualified electors have the right to determine who shall represent them, and when from any reason it is impossible to determine their choice, the question should be again submitted for their decision.

This course is fair to all, and unjust no none. It will secure them the man of their choice. Any other course might not.

We therefore recommend the adoption of the resolution herewith presented:

*Resolved*, That the seat held in this Senate by John W. Henderson, from the 27th Senatorial District be and the same is hereby declared vacant.

REPORT  
OF THE  
JOINT COMMITTEE  
OF THE  
EIGHTEENTH GENERAL ASSEMBLY  
OF THE  
STATE OF IOWA,  
APPOINTED TO VISIT THE  
STATE FISH HATCHING HOUSE,  
LOCATED AT  
ANAMOSA.

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[PRINTED BY ORDER OF THE GENERAL ASSEMBLY.]

DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





## REPORT.

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*Report of the Joint Committee of the Eighteenth General Assembly appointed to visit the State Hatching House at Anamosa.*

TO THE EIGHTEENTH GENERAL ASSEMBLY OF THE STATE OF IOWA:

YOUR committee appointed to visit the State Hatching House at Anamosa, respectfully report as follows:

On the 5th day of February, 1880, we discharged the duty assigned to us. We found the Hatching House situated about three miles from Anamosa, in Jones county, in a beautiful wooded gien, on twenty acres of land owned by the State.

A summary of the result of our observations and inquiries may be given, as follows, without any great reference to system:

The appropriation by the Seventeenth General Assembly seems to have been expended strictly according to the terms thereof. The appropriation was for the continuance of the work of propagation and distribution of fish, and did not authorize any buildings or permanent improvements.

The books of the Commissioner are kept in great detail as to all transactions and expenditures, and were found to be correct.

All bills were approved by the executive council.

The committee are unanimous in the belief that Commissioner Shaw is thoroughly competent for the position he holds, and that he is scrupulous and conscientious in expenditures of appropriations for his department. He has apparently managed the affairs of the Hatching House, as carefully as he would had the establishment been his own. Your committee are not prepared to express an opinion as to the value of the work of the commission to the State at large, other members of the General Assembly can judge of that

matter as well as the undersigned, but we believe that all the affairs pertaining to the Hatching House are well and skillfully managed. There is considerable evidence, however, that the people of the State are taking interest in the work of the commission, and desire that work continued.

Letters pertaining to the fish business reach the Commissioner at the rate of from seventy-five to one hundred per month, nearly all such letters being from citizens of the State.

As to employes, committee report:

Mr. G. F. Slocum, the Commissioner's assistant, is employed all the time, receiving \$45 per month. He occupies the residence above the Hatching House free of rent. He also cuts his wood from the States' land, and uses a piece of ground which he has cleaned of brush, for a garden. He is allowed five dollars per month additional for hauling fish feed, and seventy-five cents to one dollar per trip for hauling fish when they are to be shipped. Mrs. G. F. Slocum is occasionally employed in the Hatching House at seventy-five cents per day, when her services are needed. Mr. E. R. Shaw, the Commissioner's son, is occasionally employed, when work is urgent at \$35 per month. He was employed but little during the biennial period just past.

The expenditures of the commission for the past two years aggregated \$5,838.56, leaving a balance of \$848.20 on hands.

A fair estimate of the property of the State may be given as follows:

Twenty acres of land, worth probably.....	\$ 450 00
Hatching house 20x40 feet, with dwelling up stairs.....	1500 00
Three ponds walled with stone .....	200 00
Tanks and reservoirs.....	200 00
Barn with stone basement.....	250 00
Root house .....	100 00
House containing food-cooker, boiler, etc.....	50 00
Other outbuildings.....	75 00
Nets, seines, cans, tubs, dishes, etc., used on trips to the river after fish .....	400 00
Total .....	<u>\$ 3225 00</u>

The Commissioner in response to the committee's inquiry, stated the number of fish on hand to be about as follows:

Two thousand two and a-half year old salmon trout; 1,000 two year old salmon; 200 two year old brook trout; 15,000 one year old salmon trout, brook trout, and land-lock salmon; 350,000 young salmon trout; 100,000 young brook trout; 25,000 young land-lock salmon; also 20,000 brook trout eggs, taken from fish in the hatching house.

Fish were distributed during the past two years, as follows:

Mississippi river, natives, 1878.....	2,648,500
Inland water, natives, 1878.....	641,500
Shad, 1878.....	100,000
Lake trout, 1878.....	619,000
Lake trout, 1879.....	411,000
Salmon .....	281,510
Land-locked salmon.....	15,000
Brook trout... ..	66,300
Fish at hatching house.....	25,000
Salmon trout eggs.....	500,000
Total .....	5,307,800

The only permanent improvements made about the premises, during the biennial period, may be enumerated as follows: A small frame shed in which to cook fish food, the lumber for which cost \$13; a food cooker costing \$11; a cellar built in the hillside by Mr. Slocum, without cost to the State.

Respectfully submitted.

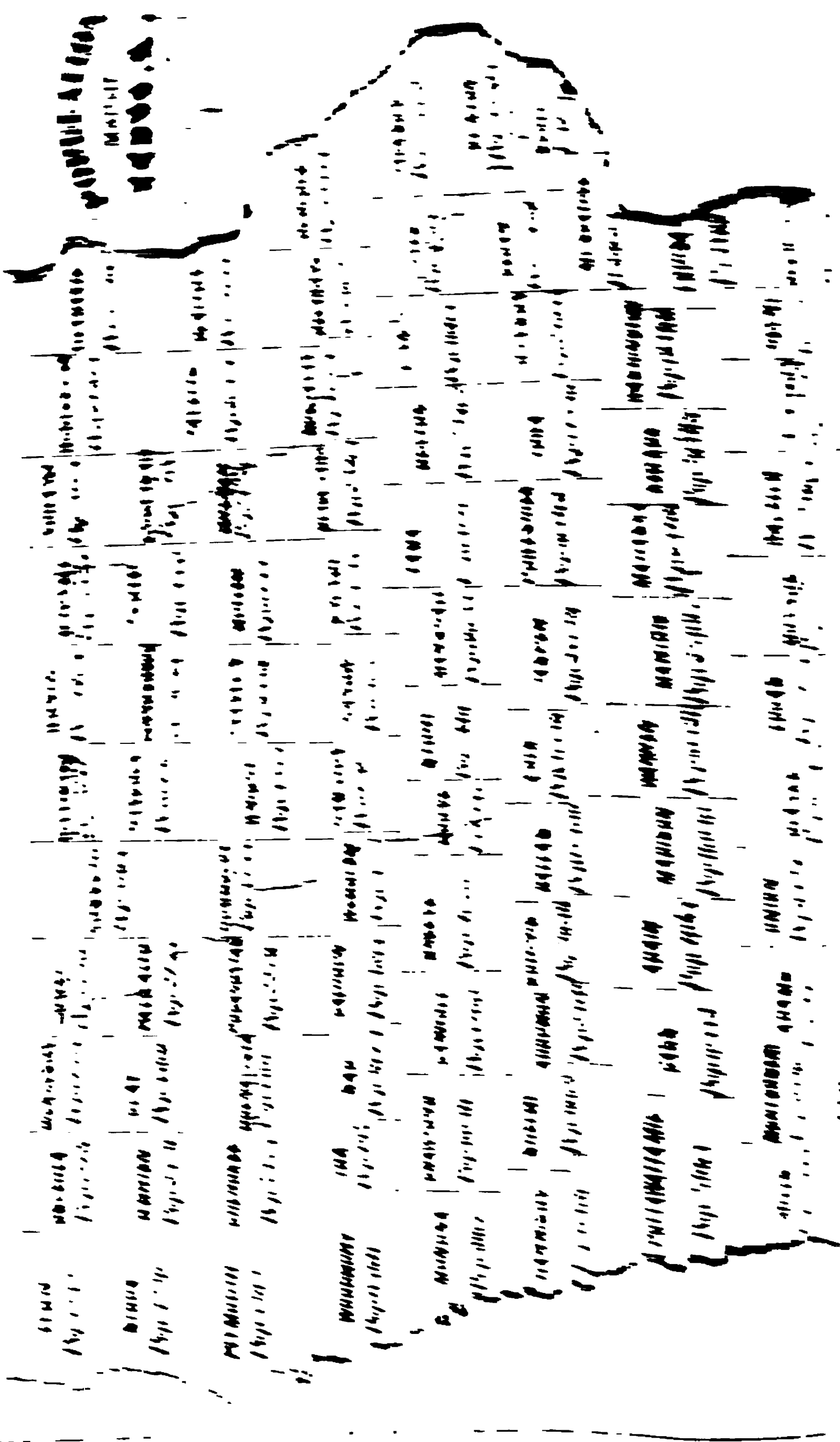
LAFAYETTE YOUNG,  
*Com. of the Senate.*

J. B. BELFRAGE,  
*Com. of the House.*

NOTE—Hon. Z. T. Fisher, of the House, appointed as a member of this committee, received a telegram, after reaching Anamosa, announcing the death of his grand-child, at Red Oak, and started homeward on the first train, as affection prompted, and therefore was not able to visit the Hatching House. Hence, his name does not appear to this report.







# RULES

OF THE

## EIGHTEENTH GENERAL ASSEMBLY

OF THE

STATE OF IOWA.

AND A LIST OF

STANDING COMMITTEES AND MEMBERS.

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DES MOINES:  
F. M. MILLS, STATE PRINTER.  
1880.





# SENATE RULES

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## ORDER OF DAILY BUSINESS.

After the journal is read, the following order shall govern:

1. Presentation of petitions or memorials.
2. Introduction of bills.
3. Resolutions.
4. Communications on the President's table.
5. Reports of Standing Committees, in the order in which they stand in the rules, except the Committee on Engrossed and Enrolled Bills.
6. Reports of Select Committees.
7. Third reading of bills.
8. Bills, other matters, and unfinished business before the Senate.
9. General orders of the day.

## STANDING RULES.

1. The President shall take the chair at the hour to which the Senate is adjourned, and call the members to order; and if a quorum be present, he shall direct the journals of the preceding day to be read, and mistakes, if any, corrected. He shall preserve order and decorum, and decide all questions of order, subject to an appeal to the Senate. He shall appoint all committees, unless otherwise especially ordered.

2. One-fourth of the members may have a call of the Senate, and absent members sent for.

3. When the vote is taken *viva voce*, questions shall be

distinctly put in this form, viz: "As many as are of the opinion (as the case may be) say 'aye.'" And after the affirmative voice is expressed: "as many as are of the contrary opinion, say 'no.'" If the President doubt, or a division be called for, the Senate shall divide—those in the affirmative of the question shall first rise from their seats, and afterward those in the negative.

4. All motions (except to adjourn, postpone, or commit) shall be reduced to writing, if required by any member of the Senate. Any motion may be withdrawn by the mover, before it is amended by the Senate.

5. Every member present when a question is put, shall vote, unless he shall, for special cause, be excused by a vote of the Senate; but no member shall vote on any question in the event of which he is directly and personally interested, or in any case where he was not present when his name was called in the taking of the vote.

6. When a member is about to speak in debate, or deliver any matter to the Senate, he shall rise from his seat and respectfully address himself to Mr. President, and shall confine himself to the question under debate, avoid personalities, and the imputation of improper motives.

7. When a question is under debate, no motion shall be received but to adjourn, to lay on the table, for the previous question, to postpone to a day certain, to commit or amend, to postpone indefinitely; which several motions shall have precedence in the order in which they are named; and no motion to postpone to a day certain, to commit, or to postpone indefinitely, being decided, shall be again allowed on the same day, and at the same stage of the bill or proposition.

8. The previous question shall be in this form: "Shall the main question be now put?" It shall only be admitted when demanded by a majority of the members present, and its effect shall be to put an end to all debate, and bring the Senate to a direct vote upon amendments reported by a committee, if any; then upon pending amendments, and then upon the main question.

9. A motion to adjourn, to lay on the table, and for the

previous question, shall be decided without debate, and all incidental questions of order arising after a motion is made for the previous question, and pending such motion, shall be decided—whether an appeal or otherwise—without debate.

10. Any member may call for a division of a question, which shall be divided, if it comprehends propositions in substance so distinct that one being taken away substantive propositions shall remain for the decision of the Senate. A motion to strike out and insert shall be deemed indivisible: but a motion to strike out being lost, shall preclude neither amendments nor a motion to strike out and insert.

11. Every bill shall be introduced on the report of a committee, or by leave. Every bill shall receive three several readings previous to its passage; but no bill shall have its second and third readings on the same day, without a suspension of this rule; and every bill shall express in its title the object of the bill.

12. The first reading of a bill shall be for information, and if objection be made to it, the question shall be, "Shall the bill be rejected?" If no objection be made, or the question to reject be lost, the bill shall go to its second reading without further question.

13. Upon the second reading of a bill or joint resolution, the President shall state it as ready for amendment, commitment or engrossment, and if committed, then the question shall be, whether to a select, or standing committee, or a committee of the whole. If to a committee of the whole, the Senate shall determine on what day. But if the bill be ordered to be engrossed, it shall be in order for its third reading at any time after that day. No bill or joint resolution shall be committed or amended until it shall have been twice read.

14. When a question is lost on engrossing a bill for a third reading on a particular day, it shall not preclude a question to engross it for a third reading on a different day. After a third reading of a bill or joint resolution, no amendment (except to fill blanks), shall be received, except by unanimous consent of the members present; and the vote

on its final passage shall be immediately taken without debate.

15. A bill or joint resolution may be committed at any time previous to its third reading.

16. In filling blanks, the largest sum and longest time shall be first put.

17. When a motion or question has been decided in the affirmative or negative, any member having voted with the majority may move a reconsideration the same, or on the next business, day.

18. Before acting on executive business, the Senate Chamber shall be cleared, by direction of the President, of all persons except members, the Secretary and Sergeant at Arms; the members enjoined to observe secrecy, and the Secretary and Sergeant-at-Arms to be sworn.

19. No standing rule or order of the Senate shall be rescinded or suspended, unless by a vote of two-thirds of the members present, except an order fixing the hour to which the Senate shall stand adjourned.

20. The rules of parliamentary practice comprised in Cushing's Manual, shall govern the Senate in all cases to which they are applicable, and in which they are not inconsistent with the standing rules or orders of the Senate, and joint rules of the Senate and House of Representatives.

21. The Senate shall, at its pleasure, elect a President, *pro tem.*, who shall hold his office during the remaining portion of the time for which the President was elected; and when the President shall from any cause be absent, the President *pro tem.* shall preside, except when the chair is filled by appointment by the President.

22. On the return of a bill from the House, with an amendment, it shall be placed with the third reading of bills, unless the Senate shall otherwise order. On the question of adopting the amendment the vote shall be taken as on the final passage of the bill; and if the amendment be adopted by a constitutional majority, no further vote is necessary.

23. It is in order for the Committee upon Engrossed and Enrolled bills, to report at any time when no question is before the Senate.

24. When any order of the day is not proceeded with on the day assigned, it shall stand as a general order on each succeeding day until disposed of, unless otherwise ordered, but its consideration cannot be moved until that order of business is reached, when it shall be taken up in the order of its file.

25. When the pending question is interrupted by a "Special Order" it shall, upon the disposal of the special order, be before the Senate in the same stage, as if it had not been so interrupted.

26. A motion to print any paper presented to the Senate, may, on motion, be referred to the committee on printing, whose duty it shall be to report on the propriety of printing, and that it shall be in order for such committee to report at any time. Bills referred to committees without order for printing may be ordered printed by the committee.

27. Committees are permitted to employ clerks by the majority vote of the whole committee. The clerk shall be selected by such vote, and in like manner may be discharged, for inefficiency or when the services of the clerk become unnecessary.

## STANDING COMMITTEES OF THE SENATE

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*Ways and Means*—Senators Larrabee, Hebard, Harmon, Madson, Kimball, Lawrence, Patterson, Russell of Jones, Greenlee, Garber, Arnold, and Gillett.

*Judiciary*—Senators Woolson, Wright, Nichols of Guthrie, Chase, Hanna, Russell of Greene, Nichols of Benton, Hemenway, Haines, Johnson of Winneshiek, Merrell, Hedges, Goodykoontz, Johnson of Mahaska, and Traverse.

*Federal Relations*—Senators Lawrence, Ford, Young, Tirrill, and Henderson.

*Constitutional Amendments*—Senators Hanna, Harmon, Keller, Dashiell, Wilson, Harned, and Kimball.

*Retrenchment*—Senators Chase, Russell of Greene, Hebard, Hartshorn, Larrabee, Traverse, Shelley, Russell of Jones, and Foster.

*Appropriations*—Senators Arnold, Ford, Merrell, Nielander, Prizer, Gaylord, Larrabee, and Boling.

*Normal Schools*—Senators Haines, Lawrence, Woolson, Foster, and Mitchell.

*Schools*—Senators Meyer, Harmon, Hemenway, Nielander, Arnold, Wilson, and Tirrill.

*Agriculture*—Senators Patterson, Greenlee, Russell of Jones, Clark, and Gaylord.

*County and Township Organization*—Senators Nichols of Guthrie, Traverse, Boling, Clark, and Garber.

*Railways*—Senators Young, Hanna, Hartshorn, Foster, Meyer, Russell of Greene, Ham, Patterson, Lewellen, Webb, Keller, Dashiell, and Shrader.

*State University*—Senators Hemenway, Nichols of Guthrie, Arnold, Johnson of Winneshiek, and Goodykoontz.

MRS. N. B. BAKER, President.  
 MISS MIRA E. TROTH, Assistant P. M.  
 J. D. MCGRATH, U. S. Marshal.

THEO. SCHREINER, Treasurer.

GEORGE H. JOHNSON, Auditor.  
 AUSTIN P. LOWERY, Sergeant at Arms.

MISS MAGGIE SMITH, Recording Clerk.  
 MISS BELL M. DIXON, Expressing Clerk.

# SENATE

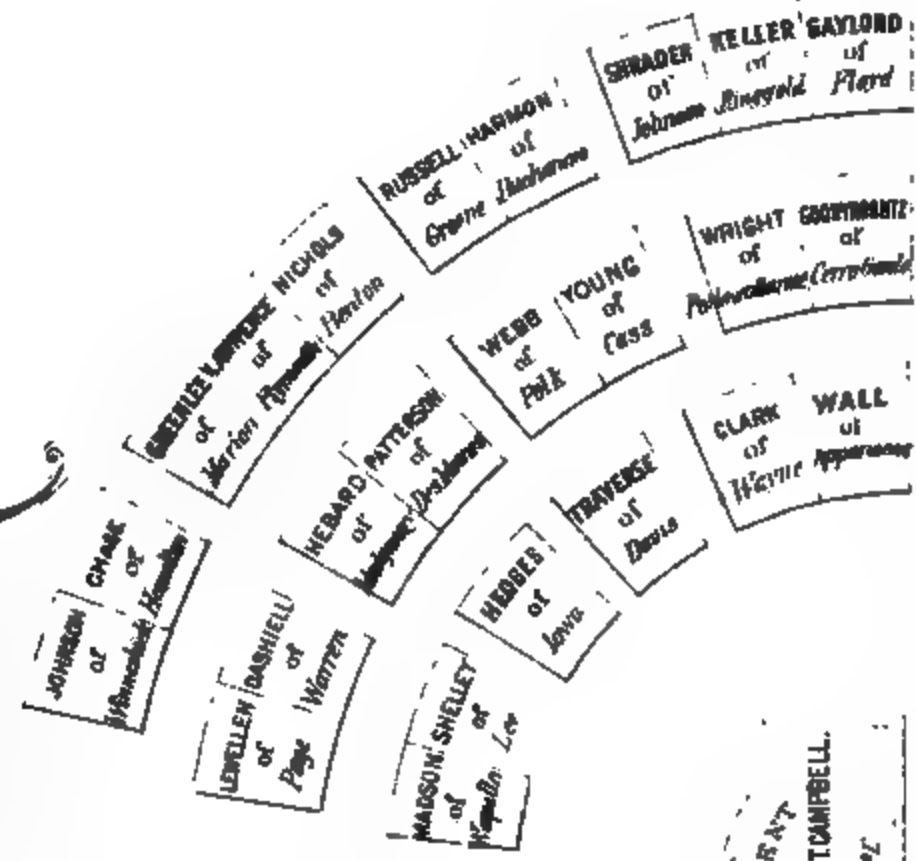
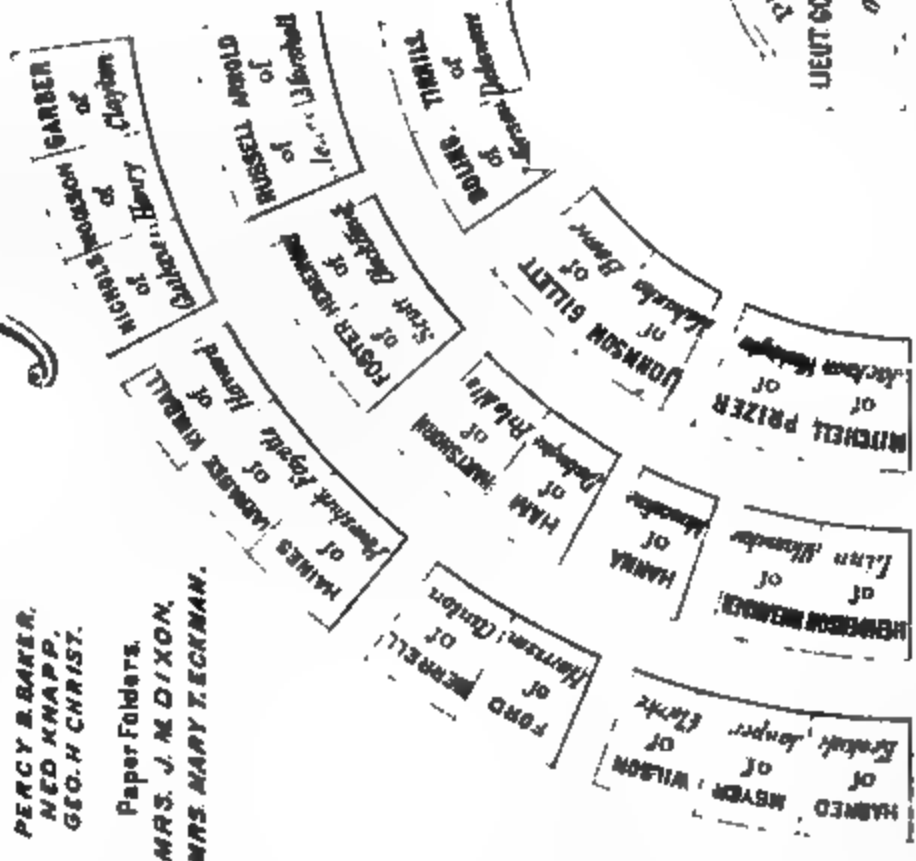
# CHAMBER

## Messengers.

PERCY B. BAKER,  
 NED KNAPP,  
 GEO. H. CHRIST.

## Paper Folders.

MRS. J. M. DIXON,  
 MRS. MARY TECKMAN.



PRESIDENT  
 LEUT. GOV. FRANK TAMPBELL,  
 of Jasper





*Military*—Senators Harmon, Nichols of Guthrie, Meyer, Shrader, Greenlee, and Madson.

*Elections*—Senators Hartshorn, Goodykoontz, Hemenway, Chase, and Harned.

*Claims*—Senators Hebard, Woolson, Wright, Clark, and Prizer.

*Banks*—Senators Ford, Kimball, Nichols of Benton, Prizer, and Wilson.

*Commerce*—Senators Nielander, Webb, and Shelley.

*Public Buildings*—Senators Webb, Prizer, Gillett, Henderson, and Boling.

*Municipal Corporations*—Senators Foster, Wright, Hanna, Webb, Shelley, Ham, and Patterson.

*Manufactures*—Senators Madson, Foster, and Merrell.

*Printing*—Senators Gaylord, Young, and Ham.

*Public Lands*—Senators Merrell, Young, and Ford.

*Internal Improvements*—Senators Shelley, Shrader, and Lewellen.

*Highways*—Senators Garber, Gaylord, and Wall.

*State Library*—Senators Johnson of Mahaska, and Wilson.

*Engrossed Bills*—Senators Gillett and Mitchell.

*Enrolled Bills*—Senators Traverse and Tirrill.

*Judicial Districts*—Senators Johnson of Winneshiek, Traverse, Gaylord, Dashiell, and Harned.

*Congressional Districts*—Senators Wright, Nichols of Guthrie, Gillett, Larrabee, Nichols of Benton, Boling, Tirrill, Russell of Jones, and Johnson of Mahaska.

*Senatorial Districts*—Senators Keller, Lewellen, Wilson, Young, Nielander, and Chase.

*Representative Districts*—Senators Arnold, Mitchell, Lawrence, and Merrell.

*Hospitals for Insane*—Senators Dashiell, Lewellen, and Shrader.

*Institution for Deaf and Dumb*—Senators Prizer, Garber, and Clark.

*College for the Blind*—Senators Hedges, Hemenway, and Kimball.

*Orphans' Home*—Senators Lewellen, Gillett, and Wall.

*Penitentiary*—Senators Boling, Harned, and Meyer.

*Reform School*—Senators Tirrill, Nielander, and Johnson of Winneshiek.

*Agricultural College*—Senators Russell of Jones, Greenlee, Haines, Wall, and Hebard.

*Horticulture and Forestry*—Senators Greenlee, Clark, and Garber.

*Suppression of Intemperance*—Senators Kimball, Meyer, Lewellen, Johnson of Mahaska, and Madson.

*Insurance*—Senators Nichols of Benton, Chase, Mitchell, Haines, and Webb.

*Compensation of Public Officers*—Senators Wilson, Ford, Johnson of Mahaska, Keller, and Henderson.

*Fish and Game*—Senators Goodykoontz, Russell of Greene, and Lawrence.

*Asylum for Feeble-Minded Children*—Senators Shrader, Haines, and Larrabee.

*Medicine, Surgery and Hygiene*—Senators Shrader, Lewellen, Patterson, Goodykoontz, and Prizer.

*Rules*—Senators Ham, Larrabee, and Traverse.

## RULES OF THE HOUSE OF REPRESENTATIVES.

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### DUTY OF THE SPEAKER.

1. He shall take the chair every day precisely at the hour to which the House shall have adjourned on the preceding day; shall immediately call the members to order, and on the appearance of a quorum shall cause the journal of the preceding day to be read.

2. He shall preserve order and decorum, and speak to points of order in preference to other members, rising from his seat for that purpose; and he shall decide questions of order, subject to an appeal to the House by any two members.

3. He shall rise to put a question, but may state it sitting.

4. Questions shall be distinctly put in this form, to-wit: "As many as are of the opinion that (as the question may be) say Aye," and after the affirmative voice is expressed, "As many as are of the contrary opinion, say No." If the Speaker doubts, or a division be called for, the House shall be divided. Those in the affirmative of the question shall first rise from their seats, and afterwards those in the negative.

5. The Speaker shall have a right to name any member to perform the duties of the chair, but such substitution shall not extend beyond an adjournment, except that in case of the absence of the regular Speaker, the House may proceed to elect a Speaker *pro tem.*, whose acts shall have the same validity as those of the Speaker.

6. All committees shall be appointed by the Speaker, unless otherwise specially directed by the House.

7. In all cases of a call of the yeas and nays, the

Speaker shall vote; in other cases he shall not be required to vote unless the House is equally divided, or unless his vote, if given to the minority, will make the division equal, and in case of such equal division the question shall be lost.

8. All acts, addresses and joint resolutions, shall be signed by the Speaker; and all writs, warrants, and subpoenas, issued by order of the House, shall be under his hand, and attested by the Clerk.

9. In case of any disturbance or disorderly conduct in the lobby, the Speaker or Chairman of the Committee of the Whole House, shall have the power to have the same cleared.

#### ORDER OF BUSINESS OF THE DAY.

10. After the journal is read, the following order shall govern:

1. Business pending at the last previous adjournment.
2. Petitions or remonstrances to be offered.
3. Reports of Committees.
4. Resolutions laid over under rule 34.
5. Bills to be introduced.
6. Resolutions.
7. Messages and communications on the Speaker's table.
8. Bills and resolutions read a second time.
9. Bills on their passage.
10. Reports in possession of the House which offer grounds for a bill, are to be taken up in order that the bill may be ordered in.
11. On and after the 10th day of February of each regular session, bills and joint resolutions which have been read the second time and engrossed, shall be taken up in their proper order at 3 o'clock in the afternoon of each session, and put upon their passage.

## OF DECORUM AND DEBATE.

11. When any member is about to speak in debate, or deliver any matter to the House, he shall rise from his seat and respectfully address himself to the presiding officer, by his title, saying, "Mr. Speaker," and shall not proceed until he shall be recognized by the Chair, and shall confine himself to the question under debate, and shall avoid personalities.

12. When any member in speaking, or otherwise, transgresses the rules of the House, the Speaker shall, or any member may, call him to order; in which case, the member so called to order shall immediately sit down, but may be permitted, with leave of the House, to explain; and the House shall, if appealed to, decide the case, but without debate. If there be no appeal, the decision of the Chair shall be submitted to; if the decision be in favor of the member so called to order, he is at liberty to proceed. If the case requires it, he shall be liable to the censure of the House.

13. When two or more members happen to rise at once, the speaker shall designate the member entitled to speak.

14. No member shall speak more than once on the same question, without leave of the House, nor more than twice until every member choosing to speak shall have spoken.

15. While the Speaker is putting any question, or addressing the House, none shall walk out or across the House, or when a member is speaking, shall entertain private discourse, nor while a member is speaking pass between him and the Chair.

16. No member shall vote on any question in the event of which he is personally interested; nor in case where he was not present when the question was put, unless the Speaker again states the question.

17. Upon a division and count of the House on any question no member without the bar shall be counted.

18. Every member who shall be in the House when the question is put, shall give his vote, unless the House, for special reasons, shall excuse him; but such member must ask to be excused before commencing to take the vote on the main question.

19. When a motion is made and seconded it shall be stated by the Speaker; or, being in writing, it shall be handed to the Chair and read aloud by the Clerk before debated.

20. Every motion, except subsidiary or incidental motions, shall be reduced to writing if the Speaker or any member desire it, but this exception shall not apply to motions to amend.

21. All bills, resolutions, petitions, memorials, or other papers, shall be accompanied by the name of the member presenting the same, and also the name of the county.

22. After a motion is stated by the Speaker, or read by the Clerk, it shall be deemed to be in possession of the House, but may be withdrawn by leave of the House.

23. When a question is under debate no motion shall be received but to adjourn; to lie on the table; for the previous question; to postpone to a day certain; to commit or amend; to postpone indefinitely; which several motions shall have precedence in the order in which they are arranged, and no motion to postpone to a day certain, to commit or postpone indefinitely, being decided, shall again be allowed on the same day and at the same stage of the bill or proposition. A motion to strike out the enacting words of a bill shall have precedence of a motion to amend, and if carried, shall be considered equivalent to its rejection.

24. When a resolution shall be offered, or a motion made to refer any subject, and different committees shall be proposed, the question shall be taken in the following order: The Committee of the Whole House; a Standing Committee; a Select Committee.

25. A motion to adjourn shall always be in order, except when a member is speaking or the house voting.

26. The previous question shall always be in this form: "Shall the main question now be put?" It shall only be admitted when demanded by a majority of the members present, and its effect shall be to put an end to all debate, and bring the house to a direct vote upon amendments, and then upon the main question. On a motion for the previous question, and prior to seconding the same, a call of the House shall be in order; but after a majority shall have

seconded such motion no call shall be in order prior to the decision of the main question.

27. Motions to lie on the table, to adjourn, and for the previous question, shall be decided without debate.

28. When a question is postponed indefinitely, it shall not be again acted upon during the session.

29. Any member may call for a division of the question, which shall be divided if it comprehends questions so distinct that one being taken away, the rest may stand entire for the discussion of the House. A motion to strike out being lost, shall preclude neither amendment nor a motion to strike out and insert. A motion to strike out and insert shall be deemed indivisible.

30. Motions and reports may be committed at the pleasure of the House.

31. No motion or proposition on a subject different from that under consideration, shall be admitted under color of amendment.

32. When a motion shall have been once made and carried in the affirmative or negative, it shall be in order for any member, voting on the prevailing side, to move for the reconsideration thereof, on the same or succeeding day, and such motion shall take precedence of all other questions, except a motion to adjourn.

33. Petitions, memorials and other papers addressed to the House, shall be presented by the Speaker, or a member in his place; a brief statement of the contents thereof shall verbally be made by the introducer, and shall not be debated or decided on the day of their being first read, unless where the House shall direct otherwise, but shall lie on the table, to be taken up in the order they were read.

34. A proposition requesting information from the Governor, Secretary, or any other State officer, shall lie on the table one day, for consideration, unless otherwise ordered by unanimous consent of the House; and all such propositions shall be taken up for consideration in the order they were presented, immediately after reports are called for from the Select Committees, and, when adopted, the Clerk shall cause the same to be delivered.

35. Any five members, if the Speaker be in the chair, shall be authorized to compel the attendance of absent members.

36. Upon calls of the House, or in taking the yeas and nays on any question, the names of the members shall be called alphabetically.

37. No member shall absent himself from the services of the House without leave, unless he be sick, or unable to attend.

38. Upon the call of the House, the names of the members shall be called over by the Clerk, and the absentees noted, after which the names of the absentees shall again be called over, and the Sergeant-at-Arms shall be directed by the Speaker to compel their attendance.

39. No committee shall sit during the sitting of the House without special leave.

40. A majority of the members shall constitute a quorum, and upon demand of any two members, the yeas and nays shall be ordered.

41. The hour to which this House shall stand adjourned from day to day shall be at 10 o'clock A. M., and 2 o'clock P. M., unless otherwise ordered by the House.

#### ON BILLS.

42. Every bill shall receive three several readings, but no bill shall have its second and third reading on the same day.

43. The first reading of the bill shall be for information; and if opposition be made to it, the question is: "Shall this bill be rejected?" If no opposition be made, or if the question to reject be negatived, the bill shall go to its second reading without a question.

44. Upon a second reading of a bill, the Speaker shall state that it is ready for commitment, amendment or engrossment; and if committed, then the question shall be, whether to a Select or Standing Committee, or to a Committee of the Whole House. If to a Committee of the Whole House, the House shall determine on what day.

45. After a bill has been committed and reported back,



it shall be considered on its second reading after the amendments of committee have been read.

46. After the commitment and the report thereof to the House or at any time before its passage, a bill may be re-committed.

47. All bills ordered to be engrossed, shall be executed in a fair round hand.

48. No amendment, unless by way of rider, shall be received to any bill on its third reading, and no debate shall be allowed on the same.

49. When a bill shall pass, it shall be certified by the clerk noting the day of its passage at the foot thereof.

50. No standing rule or order of the House shall be rescinded or changed, without one day's notice being given of the motion therefor, nor shall any rule be suspended except by a vote of at least two-thirds of the members present; nor shall the order of business as established by the rules of the House, be postponed or changed, except by a vote of at least two-thirds of the members present.

51. It shall be in order for the Committee on Enrolled Bills to report at any time.

52. No bill, memorial, or joint resolution, shall be printed unless ordered by the House, except as otherwise provided in Rule 62.

53. When any matter is referred to a standing committee by motion of any member, it shall be the duty of the chairman of such standing committee, to notify such member of the time of their sitting upon such matter so referred, and said member shall be permitted to confer with such committee during their consideration of such matter.

54. The rules of Parliamentary Practice shall govern the House in all cases where they are not inconsistent with the Standing Rules of this House and the Joint Rules of both houses.

55. Joint Resolutions shall not be required to be framed or treated as a bill, but shall be subject to the rules pertaining to ordinary and Concurrent Resolutions.

## OF COMMITTEE OF THE WHOLE HOUSE.

56. In forming Committees of the Whole House, the Speaker shall leave his chair, and a Chairman to preside in Committee, shall be appointed by the Speaker.

57. Upon bills committed to the Committee of the Whole House, the bill shall be first read throughout by the Clerk or Chairman, and then again read or debated by clauses, leaving the preamble to be last considered. After report, the bill shall be again subject to be debated and amended by clauses, before a question to engross it be taken.

58. All amendments made to an original motion in Committee shall be incorporated with a motion, and so reported.

59. All amendments made to a Report committed to a Committee of the Whole House, shall be noted and reported as in the case of Bills.

60. In filling up blanks in the Committee and in the House, the largest sum and longest time, and the highest number, shall be first put.

61. The Rules of the House shall be observed in Committee of the Whole House, so far as they are applicable.

62. Each Standing Committee shall have authority to order the printing of any bill of public importance referred to it, where the printing shall appear necessary to its proper consideration; and to order the printing of any such bill, with proposed amendments when the same is directed to be reported to the House with a recommendation that it pass.

# MESSENGERS.

FRANK ANDREWS  
LEWIS FISHER  
CHARLES NEWMIER  
JAMES WANDLING  
FRED LUCAS  
FRED BARNETT

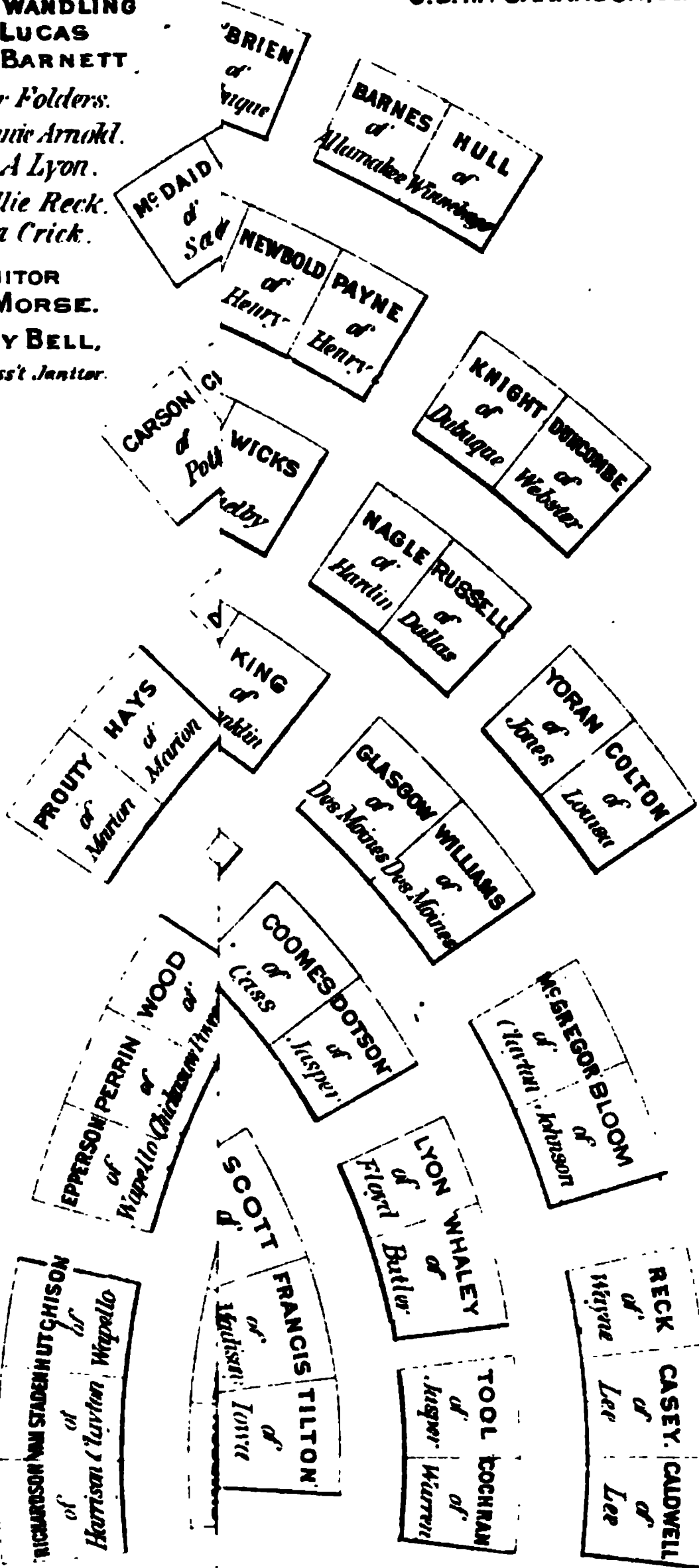
*Paper Folders.*  
Mrs. Jennie Arnold.  
Mrs. E. A. Lyon.  
Miss Mollie Reck.  
Miss Ada Crick.

JANITOR  
J. F. MORSE.  
HENRY BELL,  
*Ass't Janitor.*

# POST OFFICE.

Mrs. N. B. Baker, P.M.  
Miss Mira A. Troth, P.M.

J. D. Mc GARRAUGH, *Mail Carrier.*



*Federal Relations*—Messrs. Carson, Fisher, Nagle, Simpson, Stephens, Casey, Wicks, Hays, Struble, Hull, and Scott.

*Constitutional Amendments*—Messrs. Stockton, Wicks, Porter, Casey, Nichols, King, Struble, Harvey, Perrin, Dungan, Simpson, Hutchison of Calhoun, and Stout.

*State University*—Messrs. Dungan, Hornaday, Dean, Barnes, Bloom, Beach, Epperson, Reck, Wadleigh, Seaman, Wagner, Duncombe, Palmer, Colton, and Tool.

*Claims*—Messrs. Stephens, Baker, Hutchison of Calhoun, Cobbey, Downing, Lake, Bicknell, McGregor, Lambert, Lyon, and Russell.

*Military Affairs*—Messrs. Whaley, Bosworth, Egbert, Glasgow, Mackey, Belfrage, Lyon, Evans, and Wolfe.

*Enrolled Bills*—Messrs. Reck, Laub, Payne, Prouty, and Ehl.

*Engrossed Bills*—Messrs. Bosworth, Martindale, Porter, Cochran, and Homan.

*Library*—Messrs. Webster, Hays, Hayden, Lewis of Fayette, Duncombe, Van Staden, Lyon, Francis, Pearson, and Glasgow.

*Compensation of Public Officers*—Messrs. Wood, Williams, Blair, Caldwell, Lucas, Baker, Dotson, O'Brien, Nichols, Richey, and Dean.

*Banks and Banking*—Messrs. Lyon, Webster, Egbert, Colton, Hutchison of Calhoun, Lucas, Stephens, Whaley, and Hixson.

*Domestic Manufactures*—Messrs. Baker, Epperson, Brown of Linn, Hixson, Jordan, Martindale, Tilton, Scott, and Downing.

*Insurance*—Messrs. Struble, Harvey, Stephens, Duncombe, Perrin, Patterson, Yoran, Mueller, and Bloom.

*Public Lands*—Messrs. Wicks, Beach, Brown of Dickinson, Dungan, Colton, Bicknell, Bridges, Richardson of Jackson, and Jennings.

*Agricultural College*—Messrs. Lucas, Nichols, Muncy, Cobbey, Wolfe, Jennings, Hubbell, Homan, and Belfrage.

*Asylum for Insane*—Messrs. Payne, Muncy, Blair,

Hixson, Barnes, Evans, Stutsman, Lewis of Fayette, and Ehl.

*Deaf and Dumb Asylum*—Messrs. Stutsman, Fisher, Brown of Linn, Carson, Homan, Hubbell, Gay, Francis, and O'Brien.

*Penitentiary at Ft. Madison*—Messrs. Laub, Clayton, Stephens, Parker, Casey, Stutsman, and Wagner.

*Penitentiary at Anamosa*—Messrs. Merten, Brown of Linn, Caldwell, Hornaday, Reck, Dean, and Martindale.

*Institute for the Education of the Blind*—Messrs. Wagner, Scott, Gay, O'Brien, Tool, Cochran, and Barnes.

*Soldiers' Orphans' Home*—Messrs. Terry, Webster, Mackey, Robb, Brown of Linn, Hubbell, and Van Staden.

*Horticulture and Forestry*—Messrs. Lewis of Fayette, Evans, Pearson, Tilton, Richardson of Jackson, Francis, and Bosworth.

*Reform Schools*—Messrs. Nagle, Hayden, Dotson, Blair, Downing, Robb, and Palmer.

*Rules*—Messrs. Mueller, Lewis of Mills, Hull, Knight, and Mr. Speaker.

*Police Regulations*—Messrs. Robb, Cobbey, Coomes, Newbold, Ehl, Patterson, and Bridges.

*County and Township Organization*—Messrs. Russell, Stout, Belfrage, Downing, Evans, Cochran, Dotson, Lewis of Mills, Bosworth, Payne, Jennings, Richardson of Harrison, Lake, and Caldwell.

*Cities and Towns*—Messrs. Glasgow, Hutchison of Wapello, Egbert, Carson, Bloom, Harvey, McGregor, Knight, Struble, Casey, and Parker.

*Elections*—Messrs. Prouty, Francis, Ehl, Tool, Hull, Lambert, and Richey.

*Printing*—Messrs. Egbert, Reck, Wagner, Wadleigh, Beach, Pearson, King, Stout, and Bloom.

*Suppression of Intemperance*—Messrs. Harvey, Porter, Russell, Bloom, Stout, Brown of Linn, Wood, Hixson, Patterson, Mueller, and Palmer.

*Roads and Highways*—Messrs. Bicknell, Dotson, Nichols, Evans, Caldwell, Porter, Richardson of Harrison, Richey, Terry, Gay, and Homan.

*Judicial Districts*—Messrs. Lake, Epperson, Simpson,

Glasgow, Mackey, King, McDaid, Richardson of Harrison, and Laub.

*Congressional Districts*—Messrs. Tool, Bosworth, Knight, Brown of Dickinson, Beach, Williams, and Lambert.

*Senatorial and Representative Districts*—Messrs. Scott, Hull, Bridges, Hutchison of Wapello, Van Staden, Hornaday, Homan, Yoran, Lyon, McDaid, and Bicknell.

*Fish and Game*—Messrs. Brown of Dickinson, Hutchison of Calhoun, Dungan, Prouty, Mackey, Beach, McDaid, Caldwell, Williams, and Richardson of Harrison.

*Private Corporations*—Messrs. McGregor, Lucas, Richardson of Jackson, Hays, and Whaley.

*Asylum for Feeble-Minded Children*—Messrs. Hornaday, Epperson, Porter, Robb, Hixson, Lewis of Mills, Webster, Williams, McGregor, Hayden, and Wolfe.

*Normal Schools*—Messrs. McDaid, Merten, Barnes, Coomes, Ehl, Gay, Wadleigh, Prouty, and Brown of Dickinson.

*Retrenchment and Reform*—Messrs. Coomes, Wicks, Simpson, Wood, Terry, Van Staden, Egbert, Merten, Stockton, and Dotson.

*Board of Public Charities*—Messrs. Fisher, Blair, Dean, Lake, Clayton, Wolfe, and Tilton.

*Medicine and Surgery*—Messrs. Barnes, Stutsman, Lewis of Fayette, O'Brien, Palmer, Hayden, Hornaday, Casey, Hall, and Wagner.

*Mines and Mining*—Messrs. Seaman, Harvey, Terry, Reck, Knight, Jennings, Epperson, Colton, and Tool.

## JOINT RULES.

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1. In every case of disagreement between the two Houses, if either House requests a conference, and appoints a committee for that purpose, the other House shall appoint a committee to confer therewith upon the subject of their disagreement. They shall meet at a convenient time, to be agreed upon by their chairmen, and having conferred freely, each shall report to their respective House the result of their conference. In case of agreement, the report shall be first made, with the papers referred accompanying it, to the disagreeing House, and there acted upon; and such action shall be immediately reported by the Clerk to the other House, the papers referred accompanying the message. In case of disagreement, the papers shall remain with the House which referred them. The agreeing report of a Conference Committee shall be made, read, and signed in duplicate by all the members of the committee, or by a majority of those of each House, one of the duplicates being retained by the committee of each House. Should either House disagree to the report of the committee, such House shall appoint a second committee, and request a further conference, which shall be acceded to by the other House before adhering. The motion for a Committee of Conference, and the report of such committee, shall be in order at any time. When both Houses shall have *adhered* to their disagreement, a bill or resolution is lost.

2. When a message shall be sent from either House to the other, it shall be announced at the door of the House to which it is sent, by the door-keeper thereof, and shall be respectfully communicated to the Chair by the person by whom it is sent.

3. All messages between the two Houses shall be communicated by the Secretary or Chief Clerk, or their respective assistants.

4. When a bill shall have passed both Houses, it shall be duly enrolled by the Enrolling Clerk of the House in which it originated, and the fact of its origin shall be certified by the indorsement of the Secretary or Clerk thereof.

5. When bills are enrolled they shall be examined by a Joint Committee of two from the Senate and two from the House of Representatives, who shall be a Standing Committee for that purpose, and who shall carefully compare the enrollment with the engrossed bills, as passed in the Houses, correct any errors therein, and make report thereof forthwith to their respective Houses.

6. After the report, each bill shall be signed, first by the Speaker of the House of Representatives, and then by the President of the Senate, in the presence of their respective Houses.

7. After the bill shall have been thus signed in each House, it shall be presented by said committee to the Governor for his approval, and they shall forthwith report the day of presentation, which shall be entered upon the Journal of the House in which the bill originated.

8. All orders, resolutions, memorials, or other votes, which are to be presented to the Governor for his approval, shall be enrolled, examined, signed, and presented in the same manner as bills.

9. When any bill, joint resolution, or memorial, which shall have passed in one House, is rejected in the other, notice of said rejection shall be given to the House which passed the same.

10. When a bill, resolution or memorial, which shall have passed one House is rejected in the other, it shall not be again introduced during the session without five days' notice, and leave of two-thirds of the members voting thereon.

11. Each House shall transmit to the other, with any bill, resolution, or memorial, all papers upon which the same shall be founded.



12. When any report, bill, or resolution shall be ordered printed, by either House, without stating the number, three hundred copies shall be printed for the use of both Houses; but when any bill or resolution which may have passed one House, is ordered to be printed by the other, a greater number of copies shall not be printed than the House making the order shall determine.

13. It shall be the duty of the Chief Clerk of the House of Representatives, and the Secretary of the Senate, when any document, except bills and resolutions, is ordered to be printed in their respective Houses, forthwith to communicate such order to the other House.

14. In all elections in Joint Convention of the two Houses, the names of all the members shall be arranged in alphabetical order, and they shall be called upon to vote in the order in which they stand arranged.

15. That it shall be the duty of the Committee on Claims of each House to keep a book of record, in which shall be entered each claim for money against the State referred to them, whether presented in favor of private persons or municipal or other corporations, entering therein the name of the claimant, the amount of the claim, and the grounds thereof, with a note of the evidence offered in support of the same, and the final conclusion of the committee thereon.

2d. At the close of the session said book of record shall be deposited with the Auditor of State, to be kept by him; and he shall provide an index, showing the names of the claimants recorded therein.

3d. At any subsequent session the same shall be delivered when desired to the like committee having jurisdiction of such claims, and shall always be open to the examination of the said Committee of either House.

MEMBERS OF THE SENATE, 1880.

41 Nielander, Henry.	Lansing ..	Allamakee ..	Merchant ..	German'y. N.
9 Paterson, John.	Burlington ..	Des Moines ..	Farmer ..	Md. ...
14 Prizer, John W.	Brighton ..	Washington ..	Banker ..	Penn. ...
23 Russell, John.	Onalwa ..	Jones ..	Farmer ..	Scotland ..
48 Russell, John J.	Jefferson ..	Greene ..	Lawyer ..	Mass. ...
1 Shafley, James M.	Keokuk ..	Let. ...	Merchant ..	N. O. ...
26 Shrader, John G.	Iowa City ..	Johnson, ..	Physician ..	Ohio ...
36 Tirrell, Rodney W.	Manchester ..	Delaware ..	Real estate agent ..	N. H. ...
21 Travers, Henry C.	Bloomfield ..	Davis ..	Lawyer ..	Illinois ...
3 WALL, Jesse J.	Unionville ..	Appanoose ..	Farmer and Surveyor ..	N. O. ...
30 Webb, Robert C.	Des Moines ..	Polk ..	Grocer ..	Tenn. ...
5 Wilson, William M.	Ooscota ..	Clarke ..	Lawyer ..	N. C. ...
10 Woolson, John S.	Mt. Pleasant ..	Henry ..	Lawyer ..	N. Y. ...
19 Wright, George F.	Council Bluffs ..	Pottawattamie ..	Lawyer ..	Vt. ...
18 Young, Lafayette.	Atlantic ..	Case ..	Editor ..	Iowa ...
				31 31 160, March 31

## OFFICERS OF THE SENATE.

Newton ..	Jasper ..	Merchant ..	Ohio. ...
Spencer ..	Clay ..	Farmer ..	N. Y. ...
Iowa City ..	Johnson ..	Lawyer ..	N. Y. ...
Council Bluffs ..	Pottawattamie ..	Lawyer ..	N. Y. ...
Bloomfield ..	Davis ..	Accountant ..	Ills. ...
Newton ..	Jasper ..	Copyist ..	Ohio. ...
State Center ..	Marshall ..	Lawyer ..	Iowa ...
Mt. Pleasant ..	Henry ..	Manufacturer ..	Ger. ...
Des Moines ..	Polk ..	Laborer ..	Mo. ...
			14
			302 Married Co. H, 1st Iowa Col. Inf. ....
			500 E. Seventh St.
			1102 Locust St. ....
			Private 6th Iowa Inf. ....
			319 E. Eleventh St.
			319 E. Eleventh St.
			Capt. 144th N. Y. Inf. ....
			729 E. Sycamore St.
			1st Lieut. 7th Mich. Cavalry ..
			Kirkwood House ..
			Aborn House ..

Republicans in roman, 41; Democrats in italics, 6; Greenbackers in small caps, 2; Independent \*L. Total, 50.

## MEMBERS OF THE HOUSE OF REPRESENTATIVES, 1880.

No. of District.	NAMES OF MEMBERS.	POST-OFFICE.	COUNTY.	OCCUPATION.	Nativity.	Age.	Married.	Residence.	RESIDENCE AND RANK IN U. S. SERVICE.	BOARDING HOUSE.
65	Baker, Henry A.	Osslin.	Winnebago.	Merchant.	N. Y.	21	37	180	Married.	214 E. Sixth St.
64	Barnes, Thomas H.	Waukegan.	Allamakee.	Physician.	Ohio.	25	47	190	Married.	423 E. Sycamore St.
70	Beach, Alexander L.	East Orange.	Sioux.	Grain Dealer.	Canada.	8	32	160	Married.	Aborn House.
69	Belfrage, John B.	Sergeant's Bluffs.	Woodbury.	Farmer.	Scotland.	14	42	160	Married.	711 E. Walnut St.
76	Bicknell, Anson D.	Humboldt.	Humboldt.	Lawyer.	N. Y.	17	40	210	Married.	Kirkwood House.
57	Bird, Gilbert M.	Blairburg.	Hamilton.	Farmer.	N. Y.	24	40	150	Married.	422 E. Sycamore St.
34	Bloom, Moses.	Iowa City.	Johnson.	Merchant.	France.	23	45	185	Married.	Kirkwood House.
		Eugene.	Ringold.	Farmer.	Ohio.	39	40	145	Married.	Capital City House.
		Indianapolis.	Maheke.	Farmer.	Indiana.	30	50	180	Married.	Aborn House.
		Spirit Lake.	Dickinson.	Farmer.	N. Y.	22	42	180	Married.	618 E. Walnut St.
		Viola.	Lincoln.	Farmer.	N. Y.	37	54	200	Married.	729 E. Sycamore St.
		Oley Grove.	Lee.	Farmer.	Penn.	38	58	150	Single.	523 E. Walnut St.
		Council Bluffs.	Pottawattamie.	Lawyer.	Indiana.	10	38	210	Married.	Kirkwood House.
		Fort Madison.	Lee.	Lawyer.	Ky.	38	48	210	Married.	Kirkwood House.
		Macaulonia.	Pottawattamie.	Farmer.	Ky.	6	47	205	Married.	Aborn House.
		Vinton.	Benton.	Farmer.	Ohio.	16	55	160	Married.	619 Des Moines St.
		Lacrosse.	Warren.	Farmer.	Ohio.	24	50	254	Married.	423 E. Sycamore St.
		Columbus Junction.	Louisa.	Banker.	N. J.	37	52	127	Married.	916 Walnut St.
		Wlots.	Cass.	Farmer.	Ohio.	22	81	180	Married.	Aborn House.
		Plainfield.	Bremser.	Farmer.	N. Y.	20	46	176	Single.	Aborn House.
		Colfax.	Jasper.	Farmer.	Illinois.	31	33	164	Married.	728 Walnut St.
		Drakeville.	Davis.	Farmer.	Penn.	38	60	180	Married.	317 E. Seventh St.
		Fort Dodge.	Webster.	Lawyer.	Penn.	25	48	186	Married.	Aborn House.
		Charlton.	Lucas.	Lawyer.	Penn.	24	67	175	Married.	Aborn House.
		Davenport.	Scott.	Publisher.	Del.	23	52	185	Married.	Aborn House.
		Sherrill's Mount.	Dubuque.	Farmer.	Penn.	22	47	166	Married.	506 Fourth St.
		Edgelyville.	Wapello.	Merchant.	Ky.	19	38	146	Married.	918 Walnut St.
		Ferry.	Maheke.	Farmer.	Id.	35	57	160	Married.	1811 E. Locust St.
		Red Oak.	Montgomery.	Lawyer.	Ohio.	24	80	165	Married.	Aborn House.
		Hexter (Dallas Co.).	Madison.	Farmer.	Ohio.	24	53	146	Married.	519 Sixth St.
		Cedar Valley.	Black Hawk.	Farmer.	Vt.	23	57	180	Married.	729 E. Sycamore St.
		Burlington.	Des Moines.	Lawyer.	Ohio.	23	40	180	Married.	Aborn House.
		Des Moines.	Polk.	Lawyer.	Indiana.	23	51	194	Married.	At home.
		Libertyville.	Jefferson.	Physician.	Ohio.	30	40	130	Married.	319 E. Seventh St.

4]Hayden, John W.

26 Bay, Lorin K.....	Knobville.....	Marion.....	Lawyer.....
9 Hixson, Hamuel.....	Walnut City.....	Appanoose.....	Farmer.....
16 Homan, Edmund.....	Mt. Etna.....	Adams.....	Farmer.....
	Lenox.....	Taylor.....	Physician.....
	Washington Prairie.....	Winnebuck.....	Farmer.....
	Lake Mills.....	Winnebago.....	Physician.....
	Ottumwa.....	Wapello.....	Lawyer.....
	Lake City.....	Calhoun.....	Real Estate A.....
	Boone.....	Boone.....	Farmer.....
	Des Moines.....	Polk.....	Farmer.....
	Hampton.....	Franklin.....	Lawyer.....
	Dubuque.....	Dubuque.....	Lawyer.....
	Clinton.....	Clinton.....	Lawyer.....
	Line Springs.....	Howard.....	Lumber Dealer.....
	Denison.....	Crawford.....	Merchant.....
	Maynard.....	Fayette.....	Farmer.....
	Malvern.....	Mills.....	Lawyer.....
	Ama.....	Story.....	Banker.....
	Rockford.....	Floyd.....	Banker.....
	Sigourney.....	Keokuk.....	Lawyer.....
	Murray.....	Lake.....	Mechanic.....
	Two City.....	Sac.....	Teacher.....
	McGregor.....	Clayton.....	Merchant.....
	Earville.....	Delaware.....	Stock Dealer.....
	Davenport.....	Scott.....	Farmer.....
	Jesup.....	Buchanan.....	Farmer.....
	Alden.....	Hardin.....	Lawyer.....
	Mt. Pleasant.....	Henry.....	Merchant.....
	West Liberty.....	Muscatine.....	Farmer.....
	Mellary.....	Dubuque.....	Farmer.....
	Clear Grove.....	Guthrie.....	Farmer.....
	Marshalltown.....	Marshall.....	Lawyer.....
	St. Ansgar.....	Michell.....	Farmer.....
	Swedesburg.....	Henry.....	Farmer.....
	Washington.....	Washington.....	Farmer.....
	Nashua.....	Chickasaw.....	Farmer.....
	Leon.....	Decorah.....	Lawyer.....
	Pella.....	Marion.....	Teacher.....
	Albion.....	Wayne.....	Merchant.....
W. Riggs Station (Clinton Co.)	Jackson.....	Jackson.....	Farmer.....
Missouri Valley.....	Harrison.....	Harrison.....	Farmer.....
Afton.....	Union.....	Union.....	Farmer.....
Albia.....	Monroe.....	Monroe.....	Farmer.....
Perry.....	Dallas.....	Dallas.....	Farmer.....
Wilton (Muscatine Co.)	Cedar.....	Cedar.....	Farmer.....
Davenport.....	Scott.....	Scott.....	Farmer.....
Bellvue.....	Jackson.....	Jackson.....	Lawyer.....
Marion.....	Ida.....	Ida.....	Banker.....

## MEMBERS OF THE HOUSE.

NAME OF MEMBER.	POST-OFFICE.	COUNTY.	OCCUPATION.	RESIDENCE.	REGIMENT AND RANK IN U. S. SERVICE.	BOARDING HOUSE.
21 Stockton, Thomas R.	Sidney.....	Fremont	Lawyer	Illinois 27 46:190 Married	.....	Kirkwood House...
55 Stout, Abram V.	Parkersburg (Baker Co.)	Grundy.....	Farmer	Illinois 11 37:185 Married	.....	618 E. Walnut St...
56 Stout, George R.	Toledo.....	Tama.....	Lawyer	N. J. 53 43 140 Married	.....	Kirkwood House...
57 Stout, Daniel W.	Bonaparte.....	Van Buren...	Physician..	Indiana 35 40 140 Married	Hospital Steward, 60th U. S. Colored Regiment.	522 E. Walnut St...
58 Stout, E.	Willon.....	Muscatine....	Farmer	N. Y. 54 55 175 Married	.....	Aborn House.....
59 Stout, J.	Deep River (Poweshiek Co.)	Iowa.....	Farmer	Ohio 15 52 185 Married	.....	Capital City House.
60 Stout, John	Monroe.....	Jasper.....	Farmer	W. Va. 38 47 157 Married	.....	738 Fourth St...
61 Stout, John	McGregor.....	Clayton.....	General business.	Ger'my. 22 49 200 Single..	.....	Capital City House.
62 Stout, John B.	Clinton.....	Clinton.....	Lumber Dealer.	N. H. 16 46 175 Married	.....	Kirkwood House...
63 Stout, John E.	Blairtown.....	Benton.....	Physician..	Penn. 23 36 175 Married	Corporal Co. H, 9d Iowa Cav	Kirkwood House...
64 Stout, John E.	Clarinda.....	Pago.....	Teacher	Ohio 15 36 200 Married	Private, 74th Illinois Infantry.	Aborn House.....
65 Stout, John E.	Aplington.....	Butler.....	Grain Dealer.	N. Y. 11 41 145 Married	Capt. Co. K, 17th N. Y. Inf	112 Sixth St...
66 Stout, John E.	Harlan.....	Shelby.....	Lawyer	Indiana 10 47 245 Married	.....	Kirkwood House...
67 Stout, John E.	Huron.....	Des Moines...	Farmer	Vt. 41 63 140 Married	.....	6.8 E. Walnut St.
68 Stout, John E.	Oxford.....	Johnson.....	Farmer	Ohio. 24 54 235 Married	Captain Co. I, 6th Iowa Cav.	Kirkwood House...
69 Stout, John E.	Brooklyn.....	Poweshiek...	Merchant	N. Y. 20 44 160 Married	.....	Aborn House.....
70 Stout, John E.	Monticello.....	Jones.....	Farmer	N. Y. 24 44 180 Married	.....	Aborn House...

71 Wicks, Platt. 74 Wicks, Platt. 75 Williams, J. Wilson. 76 Wolfe, Lewis R. 77 Wood, Andrew J. 78 Yoran, Silas M.

Republicans in roman, 81; Democrats in italics, 15; Greenbackers in small caps, 6; and Independent \*1. Total, 160.

## OFFICERS OF THE HOUSE OF REPRESENTATIVES

## OFFICERS OF THE HOUSE.

[illegible]

VOTE FOR GOVERNOR AND LIEUTENANT-GOVERNOR AT THE GENERAL ELECTION, OCTOBER 14, 1879.

							LIEUTENANT-GOVERNOR.			
							Frank T. Campbell.	J. A. O. Yeoman.	M. H. Moore.	Scattering.
Adams.....	1,008	423	742	8	1	1	416	85	862	.....
Allamakee.....	1,795	1,584	206	2	2	1	1,582	416	738	.....
Appanoose.....	1,452	1,212	638	8	1	1	1,189	206	208	1
Audubon.....	812	654	11	5	1	1	653	641	9	.....
Benton.....	2,617	611	971	103	1	1	608	980	9	.....
Black Hawk.....	2,334	1,174	178	144	3	1	1,165	184	3	.....
Boone.....	1,823	1,001	556	12	1	1	1,003	551	1	.....
Bremer.....	1,382	661	509	75	1	1	643	511	.....	.....
Buchanan.....	1,970	850	804	16	1	1	846	805	1	.....
Buena Vista.....	999	198	77	17	1	1	194	79	.....	.....
Butler.....	1,726	805	60	59	1	1	803	62	.....	.....
Calhoun.....	716	257	46	1	1	1	261	44	.....	.....
Carroll.....	927	969	92	2	10	1	805	92	357	.....
Cass.....	1,907	950	360	.....	.....	1	949	355	.....	.....
Cedar.....	1,994	1,191	253	121	5	1	1,184	319	.....	.....
Cerro Gordo.....	1,442	619	20	.....	3	1	620	20	.....	.....
Cherokee.....	860	116	371	.....	.....	1	115	372	.....	.....
Chickasaw.....	1,254	782	945	.....	.....	1	774	948	.....	.....
Clarke.....	1,220	585	417	12	.....	1	584	407	.....	.....
Clay.....	731	54	2	.....	1	1	54	1	.....	.....
Clayton.....	2,693	2,219	192	19	.....	1	2,208	203	.....	.....
Clinton.....	2,724	2,497	499	195	.....	1	2,499	502	.....	.....
Crawford.....	1,263	785	73	.....	.....	1	783	75	.....	.....
Dallas.....	2,066	141	1,566	27	4	1	136	1,561	.....	.....
Davis.....	980	1,084	1,174	12	2	1	1,106	1,172	.....	.....
Decatur.....	1,379	812	615	12	.....	1	782	639	.....	.....
Delaware.....	1,999	1,290	130	15	.....	1	1,286	133	.....	.....
Des Moines.....	2,995	2,269	78	15	.....	1	2,458	74	.....	.....
Dickinson.....	321	5	2	.....	.....	1	5	2	.....	.....
Dubuque.....	2,498	3,950	707	17	.....	1	3,902	756	17	.....
Emmet.....	304	30	18	.....	.....	1	28	18	.....	.....
Fayette.....	2,570	798	1,321	18	1	1	795	1,321	.....	.....
Floyd.....	1,637	366	436	102	3	1	365	436	1	.....
Franklin.....	1,345	278	180	.....	.....	1	273	182	.....	.....
Fremont.....	1,522	1,445	400	1	.....	1	1,443	398	.....	.....
Greene.....	1,447	200	735	12	.....	1	200	735	.....	.....
Grundy.....	1,265	559	68	51	.....	1	562	69	.....	.....
Guthrie.....	1,417	320	703	8	.....	1	324	702	.....	.....
Hamilton.....	1,160	153	554	1	.....	1	153	555	.....	.....
Hancock.....	480	167	29	.....	.....	1	166	29	.....	.....
Hardin.....	1,870	671	113	203	.....	1	682	139	6	.....
Harrison.....	1,547	1,039	444	71	.....	1	1,047	449	.....	.....
Henry.....	2,011	944	528	92	.....	1	954	592	.....	.....
Howard.....	1,059	28	1,144	12	.....	1	27	1,128	.....	.....
Humboldt.....	591	84	240	4	1	1	88	237	.....	.....
Ida.....	487	163	119	.....	.....	1	165	118	.....	.....
Iowa.....	1,627	940	596	56	.....	1	935	609	1	.....
Jackson.....	1,797	2,353	421	.....	.....	1	2,353	420	.....	.....



## VOTE FOR GOVERNOR AND LIEUTENANT-GOVERNOR—CONTINUED.

COUNTIES.	GOVERNOR.					LIEUTENANT-GOVERNOR.			
	John H. Gear.	H. H. Trimble.	Daniel Campbell.	D. R. Dungan.	Scattering.	Frank T. Campbell.	J. A. O. Yeoman.	M. H. Moore.	Scattering.
Jasper .....	2,920	1,078	1,453	43	...	2,920	1,067	1,472	....
Jefferson .....	1,918	1,373	180	39	...	1,965	1,366	185	....
Johnson .....	2,439	2,661	86	14	...	2,464	2,665	88	....
Jones .....	2,413	1,705	10	63	...	2,473	1,712	8	....
Keokuk .....	2,017	1,918	151	22	...	2,043	1,932	142	....
Kossuth .....	700	245	155	...	...	699	251	153	....
Lee .....	2,406	2,858	908	9	...	2,453	2,850	892	...
Linn .....	3,842	2,735	287	64	8	3,943	2,761	282	2
Louisa .....	1,654	706	312	111	...	1,754	708	318	....
Lucas .....	1,466	896	408	1	...	1,472	886	412	...
Lyon .....	313	1	18	...	...	309	19	...	....
Madison .....	1,759	552	1,293	31	1	1,814	537	1,299	....
Mahaska .....	2,714	1,001	1,272	124	1	2,855	984	1,287	....
Marion .....	2,209	1,166	1,410	41	...	2,235	1,164	1,431	....
Marshall .....	2,180	873	450	305	...	2,471	852	475	1
Mills .....	1,571	1,076	149	31	2	1,607	1,076	148	....
Mitchell .....	1,597	642	238	19	2	1,628	643	232	....
Monona .....	831	209	490	...	...	834	205	489	....
Monroe .....	1,207	488	982	9	...	1,221	477	988	....
Montgomery .....	1,530	333	818	6	...	1,544	321	823	....
Muscatine .....	2,143	1,285	599	55	...	2,197	1,292	592	....
O'Brien .....	471	38	220	1	2	477	62	194	....
Osceola .....	423	71	...	...	...	423	71	...	....
Page .....	1,787	574	273	86	...	1,894	575	273	...
Palo Alto .....	331	323	196	...	...	339	330	181	....
Plymouth .....	873	700	21	2	...	877	701	20	....
Pocahontas .....	479	214	54	...	...	472	221	54	....
Polk .....	4,007	1,844	1,171	69	...	4,110	1,815	1,187	....
Pottawattamie .....	2,819	2,547	220	40	...	2,865	2,548	216	....
Poweshiek .....	2,215	785	827	26	...	2,254	775	833	....
Ringgold .....	1,146	55	902	1	3	1,152	52	904	....
Sac .....	883	245	190	...	6	884	249	189	....
Scott .....	3,242	1,979	286	296	2	3,518	2,000	283	2
Shelby .....	1,133	794	27	...	...	1,138	793	26	....
Sioux .....	638	302	19	...	...	640	305	17	....
Story .....	1,701	308	736	42	...	1,744	321	722	....
Tama .....	2,278	866	475	51	2	2,327	867	472	1
Taylor .....	1,589	92	1,233	4	...	1,592	89	1,241	1
Union .....	1,250	464	1,028	2	...	1,257	466	1,020	....
Van Buren .....	1,687	1,448	444	51	5	1,761	1,443	439	...
Wapello .....	2,455	2,091	291	...	...	2,467	2,082	294	....
Warren .....	2,042	838	1,092	42	...	2,102	827	1,102	....
Washington .....	2,025	1,089	471	36	3	2,085	1,084	472	1
Wayne .....	1,502	494	964	29	...	1,532	453	990	....
Webster .....	1,376	405	1,156	9	...	1,374	488	1,086	1
Winnebago .....	696	49	...	...	...	696	49	...	....
Winneshiek .....	2,014	1,171	334	1	...	2,021	1,167	336	....
Woodbury .....	1,262	974	124	...	...	1,244	969	118	....
Worth .....	1,104	257	3	...	1	1,108	257	2	....
Wright .....	754	183	...	...	...	753	184	...	....
Total .....	157,408	85,365	45,674	3,291	76	160,752	85,249	45,818	397



**ASSESSED VALUATION**  
**OF**  
**RAILROAD PROPERTY**

**IN THE**

**STATE OF IOWA,**

**AS FIXED BY THE**

**EXECUTIVE COUNCIL OF THE STATE,**

**MARCH 3, 1879.**

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**PUBLISHED BY ORDER OF THE EXECUTIVE COUNCIL.**

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**DES MOINES:**  
**R. P. CLARKSON, STATE PRINTER,**  
**1879.**



# STATEMENT,

Showing the Number of Miles of Railroads, the Assessed Value per Mile, and the aggregate Assessed Value in the several Counties of the State of Iowa, January 1, 1879, as Assessed by the Executive Council, commencing March 3, 1879:

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
<b>ADAIR</b>	18.78	..	\$101,016.00
Chicago, Rock Island & Pacific	6.61	\$11,600	76,676.00
Creston & Northern	12.17	2,000	24,340.00
<b>ADAMS</b>	30.346	..	832,928.00
Chicago, Burlington & Quincy	26.443	1	817,316.00
Chicago, Burlington & Quincy—Creston branch	3.903	..	15,612.00
<b>ALLAMAKEE</b>	64.51	..	165,967.00
Burlington, Cedar Rapids & Northern—Milwaukee Div.	2.22	..	5,560.00
Chicago, Clinton, Dubuque & Minnesota	85.27	..	116,391.00
Chicago, Milwaukee & St. Paul	4.02	..	28,316.00
Waukon & Mississippi	28.00	..	20,700.00
<b>APPANOOSE</b>	71.861	..	249,721.00
Burlington & Southwestern	20.00	..	46,000.00
Iowa Southern & Missouri Northern	29.88	..	149,400.00
Missouri, Iowa & Nebraska	14.79	..	32,538.00
St. Louis, Ottumwa & Cedar Rapids	7.261	5,000	21,788.00
<b>AUDUBON</b>	16.36	..	32,720.00
Chicago, Rock Island & Pacific—Audubon branch	16.36	2,000	32,720.00
<b>BENTON</b>	64.34	..	420,752.00
Burlington, Cedar Rapids & Northern	28.00	4,800	98,900.00
Burlington, Cedar Rapids & Northern—Pacific Division	16.50	4,000	66,000.00
Chicago & Northwestern	24.84	10,800	265,852.00
<b>BLACK HAWK</b>	66.92	..	804,882.00
Burlington, Cedar Rapids & Northern	32.82	4,900	141,126.00
Cedar Falls & Minnesota	7.38	3,000	22,140.00
Illinois Central	26.72	5,900	141,816.00
<b>BOONE</b>	33.53	..	301,550.00
Chicago & Northwestern	27.53	10,900	288,550.00
Des Moines & Fort Dodge	3.00	3,000	9,000.00
Iowa Railway, Coal & Manufacturing Co.	3.00	3,000	9,000.00
<b>BREMER</b>	28.65	..	76,384.00
Burlington, Cedar Rapids & Northern	4.18	4,900	17,974.00
Cedar Falls & Minnesota	19.47	3,000	58,410.00
<b>BUCHANAN</b>	50.33	..	194,509.00
Burlington, Cedar Rapids & Northern—Milwaukee Div.	25.60	2,500	64,500.00
Illinois Central	24.53	5,800	180,009.00
<b>BUENA VISTA</b>	25.41	..	134,673.00
Illinois Central	25.41	5,300	134,673.00
<b>BUTLER</b>	1.86	..	0
Burlington, Cedar Rapids & Northern	1.95	4,800	0
Illinois Central	1.91	5,800	0
<b>CALHOUN</b>	1.85	..	0
Illinois Central	1.85	5,800	0
<b>CARROLL</b>	80	..	0
Chicago & Northwestern	41	10,900	0
Maple River	39	2,900	0
<b>CASS</b>	1.85	..	0
Chicago, Rock Island & Pacific	47	11,600	0
Chicago, Rock Island & Pacific—Audubon Branch	18	2,000	0
<b>CEDAR</b>	1.00	..	0
Burlington, Cedar Rapids & Northern	93	4,900	0
Chicago & Northwestern	98	10,800	0
Chicago, Rock Island & Pacific	88	11,600	0
Davenport & Northwestern	170	2,500	0
Stanwood & Tipton	151	2,500	0
<b>CERRO GORDO</b>	1.07	..	0
Burlington, Cedar Rapids & Northern	1.68	4,800	0
Central of Iowa	1.34	4,000	0
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div.	1.15	3,800	0

## ASSESSED VALUATION OF RAILROAD PROPERTY.

## ASSESSED VALUATION—CONTINUED.

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
<b>CHEROKEE</b> —.....	29.80	.....	\$ 157,940.00
Illinois Central.....	29.80	5,300	157,940.00
<b>CHICKASAW</b> —.....	33.37	..	108,006.00
Cedar Falls & Minnesota.....	7.05	3,000	21,150.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div....	26.82	3,300	86,856.00
<b>CLARKE</b> —.....	26.449	.....	817,888.00
Chicago, Burlington & Quincy.....	26.449	12,000	817,888.00
<b>CLAY</b> —.....	24.31	.....	80,223.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div..	24.31	3,300	80,223.00
<b>CLAYTON</b> —.....	133.08	.....	448,054.00
Chicago, Clinton, Dubuque & Minnesota.....	74.05	3,300	267,565.00
Chicago, Milwaukee & St. Paul.....	23.78	5,800	187,924.00
Davenport & Northwestern.....	12.15	2,500	80,375.00
Iowa Eastern.....	19.10	900	17,190.00
<b>CLINTON</b> —.....	145.83	.....	655,993.00
Chicago, Clinton, Dubuque & Minnesota.....	2.50	3,300	8,250.00
Chicago, Milwaukee & St. Paul—Western Union Div....	36.04	2,300	82,892.00
Chicago & Northwestern.....	40.17	10,300	418,751.00
Davenport & Northwestern.....	33.72	2,500	84,300.00
Iowa Midland.....	33.40	2,000	66,800.00
<b>CRAWFORD</b> —.....	31.56	.....	325,068.00
Chicago & Northwestern.....	31.56	10,300	325,068.00
<b>DALLAS</b> —.....	51.54	.....	290,236.00
Chicago, Rock Island & Pacific.....	17.56	11,600	203,696.00
Des Moines, Adel & Western.....	7.00	800	5,600.00
Des Moines & Ft. Dodge.....	26.98	3,000	80,940.00
<b>DAVIS</b> —.....	65.128	.....	230,483.00
Burlington & Southwestern.....	15.40	2,300	85,420.00
Iowa Southern & Missouri Northern.....	22.73	5,000	113,650.00
Keokuk and Des Moines.....	.75	3,500	2,625.00
St. Louis, Ottumwa, & Cedar Rapids.....	26.246	3,000	78,738.00
<b>DECATUR</b> —.....	17.155	.....	34,310.00
Chicago, Burlington & Quincy—Charlton Branch.....	17.155	2,000	34,310.00
<b>DELAWARE</b> —.....	61.82	.....	220,230.00
Chicago, Milwaukee & St. Paul—Western Union Div....	7.93	2,300	18,239.00
Davenport & Northwestern.....	28.92	2,500	72,300.00
Illinois Central.....	24.47	5,300	129,691.00
<b>DES MOINES</b> —.....	75.754	.....	354,507.00
Burlington, Cedar Rapids & Northern.....	21.54	4,300	92,622.00
Burlington & Northwestern.....	27.03	600	16,218.00
Chicago, Burlington & Quincy.....	18.235	12,000	218,820.00
Keokuk & St. Paul.....	4.949	3,000	28,847.00
<b>DUBUQUE</b> —.....	70.56	.....	284,068.00
Chicago, Clinton, Dubuque & Minnesota.....	32.98	3,300	108,834.00
Chicago, Milwaukee & St. Paul—Western Union Div ...	7.78	2,300	17,894.00
Illinois Central.....	29.80	5,300	157,940.00
<b>FAYETTE</b> —.....	60.63	.....	153,655.00
Burlington, Cedar Rapids & Northern—Milwaukee Div.	44.20	2,500	110,500.00
Chicago, Clinton, Dubuque & Minnesota.....	2.60	3,300	8,590.00
Davenport & Northwestern.....	13.83	2,500	34,575.00
<b>FLOYD</b> —.....	64.23	.....	226,721.00
Burlington, Cedar Rapids & Northern.....	20.45	4,300	87,935.00
Cedar Falls & Minnesota.....	18.96	3,000	56,880.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div....	24.82	3,300	81,906.00
<b>FRANKLIN</b> —.....	28.19	.....	114,190.00
Central of Iowa.....	27.09	4,000	108,360.00
Illinois Central.....	1.10	5,300	5,890.00
<b>FREMONT</b> —.....	59.3071	.....	307,030.80
Chicago, Burlington & Quincy—Nebraska City Branch..	19.716	3,000	59,148.00
Kansas City, St. Joseph & Council Bluffs.....	27.9501	3,000	223,600.80
Nebraska City, Sidney & Northeastern.....	12.141	2,000	24,282.00
<b>GREENE</b> —.....	47.91	.....	322,653.00
Chicago & Northwestern.....	24.51	10,300	252,453.00
Des Moines & Ft. Dodge.....	23.40	3,000	70,200.00
<b>GRUNDY</b> —.....	15.37	.....	61,701.00
Burlington, Cedar Rapids & Northern—Pacific Div.....	15.20	4,000	60,800.00
Illinois Central.....	.17	5,300	901.00
<b>GUTHRIE</b> —.....	21.21	.....	246,036.00
Chicago, Rock Island & Pacific.....	21.21	11,600	246,036.00
<b>HAMILTON</b> —.....	29.98	.....	131,709.00
Des Moines & Minneapolis.....	6.78	1,300	8,749.00
Illinois Central.....	23.20	5,300	122,960.00

ASSESSED VALUATION—CONTINUED.

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
<b>HANCOCK</b> —	24.13		79,829.00
Chicago, Milwaukee & St. Paul—Iowa & Dakota Div.....	24.13		79,829.00
<b>HARDIN</b> —	62.88		241,558.00
Central of Iowa.....	28.96		115,840.00
Illinois Central.....	29.72		125,716.00
<b>HARMISON</b> —	62.81		426,079.00
Chicago & Northwestern.....	30.33		812,399.00
Sioux City & Pacific.....	32.48		113,680.00
<b>HENRY</b> —	28.80		240,660.00
Burlington & Northwestern.....	7.10		4,260.00
Chicago, Burlington & Quincy.....	19.70		236,409.00
<b>HOWARD</b> —	24.38		141,404.00
Chicago, Milwaukee & St. Paul.....	24.38		141,404.00
<b>IDA</b> —	20.68		48,024.00
Maple River.....	20.68		48,024.00
<b>IOWA</b> —	25.16		291,856.00
Chicago, Rock Island & Pacific.....	25.16		291,856.00
<b>JACKSON</b> —	61.75		170,021.60
Chicago, Clinton, Dubuque & Minnesota.....	81.80		104,940.00
Chicago, Milwaukee & St. Paul—Western Union Div.....	12.47		28,681.00
Davenport & Northwestern.....	2.88		7,200.00
Iowa Midland.....	14.60		29,200.00
<b>JASPER</b> —	72.42		506,368.00
Central of Iowa.....	8.89		15,560.00
Chicago, Rock Island & Pacific.....	84.13		895,908.00
Iowa, Minnesota & North Pacific.....	17.00		84,000.00
Keokuk & Des Moines.....	17.40		60,000.00
<b>JEFFERSON</b> —	52.319		441,628.00
Chicago, Burlington & Quincy.....	26.719		308,828.00
Iowa Southern & Missouri Northern.....	26.60		183,000.00
<b>JOHNSON</b> —	60.84		420,734.00
Burlington, Cedar Rapids & Northern.....	16.68		71,688.00
Burlington, Cedar Rapids & Northern—Iowa City Div.....	9.76		19,500.00
Burlington, Cedar Rapids & Northern—Muscatine Div.....	7.27		14,540.00
Chicago, Rock Island & Pacific.....	27.16		315,056.00
<b>JONES</b> —	46.98		222,273.00
Chicago, Milwaukee & St. Paul—Western Union Div.....	45.28		104,098.00
Davenport & Northwestern.....	30.63		70,575.00
Iowa Midland.....	20.60		41,600.00
<b>KEOKUK</b> —	25.73		141,515.00
Chicago, Rock Island & Pacific—Oskaloosa Branch.....	25.73		141,515.00
<b>KOSSUTH</b> —	24.44		60,652.00
Chicago, Milwaukee & St. Paul—Iowa & Dakota Div.....	24.44		60,652.00
<b>LEE</b> —	77.017		283,358.00
Burlington & Southwestern.....	16.10		37,080.00
Keokuk & Des Moines.....	27.15		95,025.00
Keokuk & St. Paul.....	23.517		100,551.00
St. Louis, Keokuk & Northwestern.....	.25		750.00
<b>LINN</b> —	96.44		506,402.00
Burlington, Cedar Rapids & Northern.....	20.67		88,451.00
Burlington, Cedar Rapids & Northern—Milwaukee Div.....	22.25		55,625.00
Chicago, Milwaukee & St. Paul—Western Union Div.....	26.32		60,536.00
Chicago & Northwestern.....	29.30		301,790.00
<b>LOUISA</b> —	42.08		203,686.00
Burlington, Cedar Rapids & Northern.....	23.17		99,631.00
Chicago, Rock Island & Pacific—Oskaloosa Branch.....	18.91		104,005.00
<b>LUCAS</b> —	62.11		372,640.00
Chariton, Des Moines & Southern.....	11.64		25,080.00
Chicago, Burlington & Quincy.....	26.841		322,092.00
Chicago, Burlington & Quincy, Chariton Branch.....	13.729		27,458.00
<b>MADISON</b> —	19.80		119,297.00
Chicago, Rock Island & Pacific.....	7.67		68,972.00
Chicago, Rock Island & Pacific—Ind. & Winterset Br.....	12.13		30,325.00
<b>MAHASKA</b> —	71.47		312,850.00
Central of Iowa.....	25.17		100,690.00
Chicago, Rock Island & Pacific—Oskaloosa Branch.....	24.90		187,280.00
Keokuk & Des Moines.....	21.34		74,680.00
<b>MARION</b> —	42.594		165,213.00
Albia, Knoxville & Des Moines.....	22.444		44,888.00
Chicago, Rock Island & Pacific—Oskaloosa Branch.....	12.65		69,575.00
Keokuk & Des Moines.....	14.50		50,750.00

## ASSESSED VALUATION—CONTINUED.

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
<b>MARSHALL</b> —	55.78		\$ 386,857.00
Central of Iowa	29.79	4,000	119,160.00
Chicago & Northwestern	25.99	10,800	280,697.00
<b>MILLS</b> —	57.5518		527,902.41
Chicago, Burlington & Quincy	30.249	12,000	362,988.00
Kansas City, St. Joseph & Council Bluffs	18.8948	8,000	151,158.40
Nebraska City, Sidney & Northwestern	8.918	2,000	17,836.00
<b>MITCHELL</b> —	30.47		93,735.00
Cedar Falls & Minnesota	22.72	3,000	68,160.00
Chicago, Milwaukee & St. Paul—Iowa and	7.75	3,800	29,575.00
<b>MONONA</b> —	29.68		99,104.00
Maple River	3.08	2,900	8,932.00
Sioux City & Pacific	25.70	3,500	90,850.00
<b>MONROE</b> —	53.101		400,092.00
Albia, Knoxville & Des Moines	10.773	2,000	21,546.00
Central of Iowa	13.55	4,000	54,200.00
Chicago, Burlington & Quincy	27.779	12,000	333,348.00
<b>MONTGOMERY</b> —	37.166		352,288.00
Brownville & Nodaway Valley	2.800	2,000	5,600.00
Chicago, Burlington & Quincy	27.020	12,000	324,240.00
Chicago, Burlington & Quincy—Nebraska	7.756	3,000	23,268.00
<b>MUSCATINE</b> —	33.34		519,712.00
Burlington, Cedar Rapids & Northern	16.00	4,300	68,800.00
Burlington, Cedar Rapids & Northern—M	19.18	2,000	38,360.00
Chicago, Rock Island & Pacific	24.77	11,000	272,552.00
Chicago, Rock Island & Pacific—Oaklands	20.44	5,500	112,420.00
<b>O'BRIEN</b> —	30.69		101,277.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div...	24.07	3,300	79,431.00
Sioux City & St. Paul	6.62	3,300	21,846.00
<b>OSCEOLA</b> —	17.99		50,367.00
Sioux City & St. Paul	17.99	3,800	68,367.00
<b>PAGE</b> —	23.619		50,057.00
Brownville & Nodaway Valley	11.800	2,000	23,600.00
Chicago, Burlington & Quincy—Nebraska City Branch	11.819	3,000	35,457.00
<b>PALO ALTO</b> —	24.34		80,322.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div...	24.34	3,300	80,322.00
<b>PLYMOUTH</b> —	56.30		316,170.00
Illinois Central	31.85	5,800	185,235.00
Sioux City & Pembina	11.80	3,500	41,300.00
Sioux City & St. Paul	9.45	3,800	35,910.00
<b>POCAHONTAS</b> —	9.80		51,940.00
Illinois Central	9.80	5,300	51,940.00
<b>POLK</b> —	38.89		498,000.00
Chicago, Rock Island & Pacific	27.65	11,000	304,140.00
Chicago, Rock Island & Pacific—Ind. & Wint. Branch	9.88	2,500	24,700.00
Des Moines & Fort Dodge	9.80	2,000	19,600.00
Des Moines & Minneapolis	24.00	1,800	43,200.00
Keokuk & Des Moines	17.56	3,500	61,460.00
<b>POTTAWATTAMIE</b> —	76.7574		628,681.20
Chicago, Burlington & Quincy	1.670	12,000	20,040.00
Chicago & Northwestern	20.82	10,800	224,448.00
Chicago, Rock Island & Pacific	46.16	11,000	507,866.00
Chicago, Rock Island & Pacific—Harlan Branch	1.13	2,000	2,260.00
Kansas City, St. Joseph & Council Bluffs	6.7574	3,000	20,272.20
<b>POWESHIEK</b> —	61.715		416,313.00
Central of Iowa	32.81	4,000	131,240.00
Chicago, Rock Island & Pacific	26.58	11,000	292,548.00
Grinnell & Montezuma	13.876	2,200	30,527.00
<b>SAC</b> —	30.85		46,805.00
Maple River	26.35	2,300	60,605.00
<b>SCOTT</b> —	48.41		245,786.00
Chicago, Rock Island & Pacific	13.71	11,000	150,820.00
Davenport & Northwestern	34.70	2,500	86,750.00
<b>SHELBY</b> —	17.12		85,776.00
Chicago, Rock Island & Pacific	6.41	11,000	70,510.00
Chicago, Rock Island & Pacific—Harlan Branch	10.71	2,000	21,420.00
<b>SIoux</b> —	37.50		123,750.00
Chicago, Milwaukee & St. Paul—Iowa and Dakota Div...	15.43	3,300	50,919.00
Sioux City & St. Paul	22.07	3,300	72,831.00



# ASSESSED VALUATION OF RAILROAD PROPERTY.

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## ASSESSED VALUATION.—CONTINUED.

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
<b>STORY</b> —	50.28		\$ 288,369.00
Chicago & Northwestern	24.23	\$10,800	249,569.00
Des Moines & Minneapolis	26.00		88,800.00
<b>TAMA</b> —	45.82		336,923.00
Burlington, Cedar Rapids & Northern—Pacific Div.	17.48		69,920.00
Chicago & Northwestern	25.34		261,002.00
Toledo & Northwestern	8.00		6,000.00
<b>TAYLOR</b> —	28.081		112,124.00
Chicago, Burlington & Quincy—Oreston Br.	28.081		112,124.00
<b>UNION</b> —	44.846		368,921.00
Chicago, Burlington & Quincy	25.775		309,300.00
Chicago, Burlington & Quincy—Oreston Br.	10.741		42,984.00
Oreston & Northern	8.330		16,600.00
<b>VAN BUREN</b> —	61.60		181,880.00
Burlington & Southwestern	28.10		64,680.00
Keokuk & Des Moines	33.50		117,200.00
<b>WAPELLO</b> —	74.869		495,231.00
Chicago, Burlington & Quincy	26.856		322,272.00
Iowa Southern & Missouri Northern	7.71		38,550.00
Keokuk & Des Moines	30.00		105,000.00
St. Louis, Ottumwa & Cedar Rapids	9.808		29,409.00
<b>WARREN</b> —	31.59		76,295.00
Chariton, Des Moines & Southern	5.860		10,720.00
Chicago, Rock Island & Pacific—Ind. and Wint. Br.	26.23		65,575.00
<b>WASHINGTON</b> —	44.87		222,595.00
Burlington, Cedar Rapids & Northern—Muscatine Div.	4.50		9,000.00
Chicago, Rock Island & Pacific—Oskaloosa Br.	25.49		140,195.00
Iowa Southern & Missouri Northern	14.68		73,400.00
<b>WAYNE</b> —	34.656		152,852.00
Chicago, Burlington & Quincy—Chariton Br.	6.876		13,752.00
Iowa Southern & Missouri Northern	27.78		138,900.00
<b>WEBSTER</b> —	65.45		219,452.00
Crooked Creek	8.50		5,100.00
Des Moines & Fort Dodge	21.21		69,680.00
Fort Dodge & Fort Ridgely	9.00		9,000.00
Illinois Central	26.74		141,722.00
<b>WINNEBIEG</b> —	56.82		292,454.00
Burlington, Cedar Rapids & Northern—Milwaukee Div.	1.14		2,850.00
Chicago, Milwaukee & St. Paul	42.608		247,128.40
Chicago, Milwaukee & St. Paul—Iowa & Dakota Div.	12.872		42,477.60
<b>WOODBURY</b> —	41.07		142,699.00
Illinois Central	6.41		33,973.00
Maple River	5.55		12,765.00
Sioux City & Pacific	22.20		78,015.00
Sioux City & Pembina	5.70		14,250.00
Sioux City & St. Paul	1.12		3,696.00
<b>WORTH</b> —	31.94		122,087.00
Burlington, Cedar Rapids & Northern	7.22		31,046.00
Central of Iowa	13.45		58,900.00
Chicago, Milwaukee & St. Paul—Iowa & Dakota Div.	11.27		87,191.00
<b>Total.</b>	4622.9508		\$23,540,204.40

## STATEMENT

*Showing the Length of the Several Railroads in the State of Iowa, January 1, 1879;  
also, the Assessed Valuation per mile as fixed by the Executive Council, March  
3, 1879, pursuant to the provisions of Chapter 5, Title 10, of the Code of 1873:*

NAME OF RAILROAD	LENGTH MILES	ASSESSED VALUATION PER MILE	TOTAL ASSESSED VALUATION
Des Moines & Minneapolis	58.78	1,300	76,414.00
Fort Dodge & Fort Ridgely	9.00	1,000	9,000.00
Grinnell & Montezuma	13.875	2,200	30,426.00
Illinois Central	326.68	5,300	1,730,874.00
Cedar Falls & Minnesota	75.58	3,000	226,740.00
Iowa Eastern	19.10	900	17,190.00
Iowa, Minnesota & North Pacific	17.00	2,000	34,000.00
Iowa Railway, Coal & Manufacturing Company	8.00	3,000	24,000.00
Kansas City, St. Joseph & Council Bluffs	53.0023	8,000	424,718.40
Keokuk & Des Moines	162.20	3,500	567,700.00
Missouri, Iowa & Nebraska	14.79	2,200	32,538.00
St. Louis, Keokuk & Northwestern	.25	3,000	750.00
St. Louis, Ottumwa & Cedar Rapids	48.81	3,000	146,430.00
Sioux City & Pacific	80.47	3,500	281,645.00
Sioux City & Pembina	17.60	2,500	44,000.00
Sioux City & St. Paul	67.25	3,200	215,200.00
Toledo & Northwestern	8.00	2,000	16,000.00
Waukon & Mississippi	23.00	900	20,700.00
<b>Total</b>	<b>1,322.9508</b>		<b>\$ 22,540,904.40</b>

# ASSESSED VALUATION OF RAILROAD PROPERTY.

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## STATEMENT,

*Showing the Assessed Value per Mile and the Aggregate Assessed Value in each of the several counties of the State of Iowa, of Sleeping Cars not owned by the Railroads, January 1st, 1879, as assessed by the Executive Council, March, 1879, as provided in Chapter 114, Acts of the Seventeenth General Assembly:*

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
ADAMS—	20.449		\$2,044.90
Chicago, Burlington & Quincy.....	20.44	\$ 100	2,044.90
ALLAMAKEE—	89.20		2,165.50
Chicago, Clinton, Dubuque & Minnesota.....	85.27	50	1,763.50
Chicago, Milwaukee & St. Paul.....	4.02	100	402.00
APPANOOSE—	7.261		726.10
St. Louis, Ottumwa & Cedar Rapids.....	7.261	100	726.10
BENTON—	47.44		2,162.00
Burlington, Cedar Rapids & Northern.....	20.00	40	800.00
Chicago & Northwestern.....	27.44	50	1,372.00
BLACK HAWK—	82.82		1,812.80
Burlington, Cedar Rapids & Northern.....	82.82	40	1,812.80
BOONE—	27.53		1,376.50
Chicago & Northwestern.....	27.53	50	1,376.50
BREMER—	4.18		107.20
Burlington, Cedar Rapids & Northern.....	4.18	40	107.20
BUTLER—	20.05		800.00
Burlington, Cedar Rapids & Northern.....	20.05	40	800.00
CARROLL—	20.41		1,270.50
Chicago & Northwestern.....	20.41	50	1,270.50
CEDAR—	80.01		1,600.20
Burlington, Cedar Rapids & Northern.....	40.01	40	1,600.20
Chicago & Northwestern.....	40.00	50	1,600.00
CERRO GORDO—	84.02		1,680.40
Burlington, Cedar Rapids & Northern.....	10.54	40	421.60
Central of Iowa.....	24.84	50	1,242.00
CLARKE—	20.449		2,044.90
Chicago, Burlington & Quincy.....	20.449	100	2,044.90
CLAYTON—	101.83		2,036.60
Chicago, Clinton, Dubuque & Minnesota.....	74.05	50	1,481.00
Chicago, Milwaukee & St. Paul.....	27.78	100	2,778.00
CLINTON—	42.07		2,103.50
Chicago, Clinton, Dubuque & Minnesota.....	2.50	50	125.00
Chicago & Northwestern.....	40.17	50	2,008.50
CRAWFORD—	81.56		1,631.20
Chicago & Northwestern.....	81.56	50	1,631.20
DAVIS—	20.216		2,021.60
St. Louis, Ottumwa & Cedar Rapids.....	20.216	100	2,021.60
DES MOINES—	89.775		2,044.37
Burlington, Cedar Rapids & Northern.....	21.54	40	861.60
Chicago, Burlington & Quincy.....	18.235	100	1,823.50
DUBUQUE—	82.94		1,658.80
Chicago, Clinton, Dubuque & Minnesota.....	82.94	50	1,658.80
FAYETTE—	2.00		180.00
Chicago, Clinton, Dubuque & Minnesota.....	2.00	50	180.00
FLOYD—	20.45		818.00
Burlington, Cedar Rapids & Northern.....	20.45	40	818.00
FRANKLIN—	27.09		1,354.50
Central of Iowa.....	27.09	50	1,354.50
FREMONT—	27.9501		2,795.01
Kansas City, St. Joseph & Council Bluffs.....	27.9501	100	2,795.01
GREENE—	24.51		1,225.50
Chicago & Northwestern.....	24.51	50	1,225.50
HARDIN—	28.96		1,448.00
Central of Iowa.....	28.96	50	1,448.00
HARRISON—	80.88		1,617.60
Chicago & Northwestern.....	80.88	50	1,617.60
HENRY—	19.70		1,970.00
Chicago, Burlington & Quincy.....	19.70	100	1,970.00

## ASSESSED VALUATION—CONTINUED.

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate as- sessed value.
HOWARD— .....	24.88	.....	2,488.00
Chicago, Milwaukee & St. Paul.....	24.88	100	2,488.00
JACKSON— .....	31.80	.....	1,590.00
Chicago, Clinton, Dubuque & Minnesota.....	31.80	50	1,590.00
JASPER— .....	3.89	.....	194.50
Central of Iowa .....	3.89	50	194.50
JEFFERSON— .....	25.719	.....	2,571.90
Chicago, Burlington & Quincy.....	25.719	100	2,571.90
JOHNSON— .....	16.66	.....	666.40
Burlington, Cedar Rapids & Northern ..	16.66	40	666.40
LINN— .....	49.87	.....	2,287.80
Burlington, Cedar Rapids & Northern....	20.57	40	822.80
Chicago & Northwestern.....	29.30	50	1,465.00
LOUISA— .....	23.17	.....	926.80
Burlington, Cedar Rapids & Northern.....	23.17	40	926.80
LUCAS— .....	26.841	.....	2,684.10
Chicago, Burlington & Quincy.....	26.841	100	2,684.10
MAHASKA— .....	25.17	.....	1,258.50
Central of Iowa.....	25.17	50	1,258.50
MARSHALL— .....	55.78	.....	2,789.00
Central of Iowa.....	29.79	50	1,489.50
Chicago & Northwestern.....	25.99	50	1,299.50
MILLS— .....	48.6338	.....	4,863.38
Chicago, Burlington & Quincy ..	30.249	100	3,024.90
Kansas City, St. Joseph & Council Bluffs.....	18.3848	100	1,838.48
MONROE— .....	41.829	.....	3,455.40
Central of Iowa .....	18.55	50	677.50
Chicago, Burlington & Quincy.....	27.779	100	2,777.90
MONTGOMERY— .....	27.020	.....	2,702.00
Chicago, Burlington & Quincy.....	27.020	100	2,702.00
MUSCATINE— .....	19.00	.....	760.00
Burlington, Cedar Rapids & Northern ..	19.00	40	760.00
POTTAWATTAMIE— .....	29.4474	.....	1,903.74
Chicago, Burlington & Quincy.....	1.870	100	187.00
Chicago & Northwestern .....	20.82	50	1,041.00
Kansas City, St. Joseph & Council Bluffs.....	6.7574	100	675.74
POWESHIEK— .....	22.81	.....	1,140.50
Central of Iowa .....	22.81	50	1,140.50
STORY— .....	24.23	.....	1,211.50
Chicago & Northwestern.....	24.23	50	1,211.50
TAMA— .....	25.34	.....	1,267.00
Chicago & Northwestern .....	25.34	50	1,267.00
UNION— .....	25.775	.....	2,577.50
Chicago, Burlington & Quincy.....	25.775	100	2,577.50
WAPELLO— .....	36.659	.....	3,665.90
Chicago, Burlington & Quincy .....	26.856	100	2,685.60
St. Louis, Ottumwa & Cedar Rapids.....	9.803	100	980.30
WINNESHIEK— .....	42.608	.....	4,260.80
Chicago, Milwaukee & St. Paul.....	42.608	100	4,260.80
WORTH— .....	20.67	.....	981.90
Burlington, Cedar Rapids & Northern ..	7.22	40	288.80
Central of Iowa .....	13.45	50	672.50
Total .....	1430.4563		\$92,938.48

STATEMENT,

*Showing the number of Miles on which Sleeping-cars, not owned by the Railroad Companies, are run in the State of Iowa, and the Assessed Valuation per mile, and Aggregate Assessed Value, as fixed by the Executive Council, March, 1879, as required by the provisions of Chapter 114, Acts of the Seventeenth General Assembly:*

COUNTIES, AND RAILROADS IN EACH.	Number of miles.	Assessed value per mile.	Aggregate as- sessed value.
Burlington, Cedar Rapids & Northern.....	229.07	\$40.00	\$ 9,162.8
Central of Iowa.....	189.05	50.00	9,452.5
Chicago, Burlington & Quincy.....	282.936	100.00	28,293.60
Chicago, Clinton, Dubuque & Minnesota.....	188.20	50.00	9,160.00
Chicago, Milwaukee & St. Paul.....	94.788	100.00	9,478.80
Chicago & Northwestern.....	355.01	50.00	17,750.50
Kansas City, St. Joseph & Council Bluffs.....	53.0923	100.00	5,309.23
St. Louis, Ottumwa & Cedar Rapids.....	43.31	100.00	4,331.00
Total.....	1430.4563	.....	\$ 92,938.43

TABLE,

Showing for the Year 1878 the Aggregate Gross and Net Earnings, Average Gross and Net Earnings per mile, Operating Expenses, Cost per mile in Operating Road, Loss in Operating Road, and amount of Taxes Paid:

NAMES OF RAILROADS.	Taxes paid.							
	Aggregate Gross Earnings.	Aggregate Net Earnings.	Average Gross Earnings per mile.	Average Net Earnings per mile.	Operating Expenses, Repairs and Taxes.	Cost per mile in operating road.	Loss in operating road.	Taxes paid.
	\$ 1,327,667.54	450,023.75	\$ 3,577.17	\$ 1,053.77	\$ 1,077,643.79	\$ 2,523.40		\$ 301.00
	15,418.91	1,261.43	451.05	383.95	14,157.48	414.09		
	126,577.07	1,569.28	1,569.28	383.95	114,780.67	1,441.96		19,907.68
	755,658.49	190,081.49	3,997.13	952.58	575,577.00	8,044.57		108,917.85
	4,815,833.14	1,898,755.06	8,780.40	8,518.65		5,220.75		14,680.70
	451,978.74	158,658.05	2,407.12	866.03		1,401.09		30,204.52
	701,092.55	207,288.27	2,016.43	581.80		1,484.63		6,112.84
	184,293.15		1,018.21			1,217.75	27,077.54	105,588.96
	3,698,723.21	627,760.74	10,634.14	1,768.31		8,565.82	140,766.35	5,929.89
	81,777.79		1,188.68			8,234.65		
	20,094.68	2,000.00	640.48	33.25		616.23		
	14,138.89	2,123.89	1,660.85	250.75		1,410.10		
	5,468,944.89	2,592,187.09	8,279.99	8,925.98	2,874,808.90	4,334.08		139,775.45
	6,091.55		599.85		8,049.47	916.09	2,954.92	388.96
	214,247.87	9,094.81	1,394.62	56.65	205,152.56	1,777.97		11,859.09
	288.20		41.17		318.09	45.43	29.80	
	211,637.92	75,805.91	2,522.68	603.68	185,822.01	1,618.05		7,038.47
	65,890.35	18,347.23	1,161.68	323.41	47,552.13	638.22		2,798.65
	12,858.16	7,509.90	960.96	561.16	5,343.20	389.50		
	1,578,568.48		8,476.73		1,575,426.91	8,917.41	38,898.43	61,756.73
	18,700.08	7,060.66	980.10	370.14	11,650.42	609.99		48.64
	0,604.16	939.63	2,201.88	313.21	5,661.53	1,898.17		409.08
	846,176.15	106,773.95	6,407.26	2,011.10	233,402.20	4,346.15		8,000.00

Keokuk & Des Moines.....	514,711.86	101,704.16	3,178.81	627.02	418,007.70	2,546.29	.....	.....	10,832.70
Missouri, Iowa & Nebraska.....	10,475.84	2,428.90	1,316.82	164.29	17,046.94	1,152.60	.....	.....	170.64
St. Louis, Keokuk & North Western.....	647.51	.....	2,590.05	.....	679.10	2,716.40	81.59	.....	15.85
St. Louis, Ottumwa & Cedar Rapids.....	56,894.62	.....	1,318.66	.....	88,763.94	2,049.60	81,873.72	.....	.....
Sioux City & Pacific.....	238,516.36	70,957.54	2,964.04	830.54	167,658.82	2,088.50	.....	.....	7,686.56
Sioux City & Pembina.....	29,061.43	14,089.16	1,651.21	797.67	15,022.27	853.54	.....	.....	.....
Sioux City & St. Paul.....	912,247.92	58,499.70	3,707.88	1,021.83	153,748.22	2,685.56	.....	.....	9,262.70
Toledo & North Western.....	6,084.06	1,115.00	2,011.35	371.66	4,919.06	1,689.68	.....	.....	120.00
Waukon & Mississippi—no report .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	\$ 21,294,275.32	\$6,629,295.33	.....	.....	\$ 14,892,855.94	.....	\$ 239,602.35	.....	\$ 552,490.11

\* "Balance shown between earnings and expenses was more than spent in extraordinary repairs."

† Main line and branches.

‡ "Operating Expenses" includes \$1,287,052.86 paid for rental.

§ "Operating Expenses" includes \$616,880.00 paid for rental.

## TABLE

*Showing Names and Post-Office address of the principal Officers of Railroad Companies in the State, and those operating roads in this State:*

## BURLINGTON, CEDAR RAPIDS &amp; NORTHERN.

President, Fred Taylor, New York.  
 Vice-President and General Manager, Edward F. Winslow, Cedar Rapids, Iowa.  
 Secretary, Wm. D. Walker, Cedar Rapids, Iowa.  
 Treasurer, Alexander Taylor, New York.  
 Superintendent, C. J. Ives, Cedar Rapids, Iowa.  
 Chief Engineer, Wm. P. Clark, Cedar Rapids, Iowa.  
 Auditor, J. C. Brooksmit, Cedar Rapids, Iowa.

## BURLINGTON &amp; NORTHWESTERN.

President, Charles Mason, Burlington, Iowa.  
 Vice-President, David Leonard, Burlington, Iowa.  
 Secretary and Treasurer, R. M. Green, Burlington, Iowa.  
 General Superintendent, John T. Gerry, Burlington, Iowa.

## BURLINGTON &amp; SOUTHWESTERN.

President, Elijah Smith, Burlington, Iowa.

## CENTRAL OF IOWA.

Receiver and General Superintendent, H. L. Morrill, Marshalltown, Iowa.  
 Engineer and Road-Master, C. C. Gilman, Marshalltown, Iowa.  
 Auditor, J. Robinson, Marshalltown, Iowa.

## CHICAGO, BURLINGTON &amp; QUINCY.

President, John M. Forbes, Boston, Massachusetts.  
 Vice-President and General Manager, Charles E. Perkins, Burlington, Iowa.  
 Secretary, E. D. Barbour, Chicago, Illinois.  
 Treasurer, A. T. Hall, Chicago, Illinois.  
 General Superintendent, Thos. J. Potter, Burlington, Iowa.  
 Chief Engineer, R. J. McClure, Burlington, Iowa.  
 Auditor, George Tyson, Boston, Massachusetts.  
 Superintendent of Iowa Division, W. C. Perkins, Burlington, Iowa.

## CHICAGO, CLINTON, DUBUQUE &amp; MINNESOTA.

President, James F. Joy, Detroit, Michigan.  
 Vice-President, Alpheus Hardy, Boston, Massachusetts.  
 Secretary and Treasurer, Chas. Merriam, Boston, Massachusetts.  
 General Superintendent, Chief Engineer and Auditor, F. O. Wyatt, Dubuque, Iowa.



## LIST OF OFFICERS.

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### CHICAGO, MILWAUKEE & ST. PAUL.

President, Alexander Mitchell, Milwaukee, Wisconsin.  
Vice-President, Julius Wadsworth, New York.  
Secretary and Treasurer, R. D. Jennings, Milwaukee, Wisconsin.  
General Manager, S. S. Merrill, Milwaukee, Wisconsin.  
Chief Engineer, D. J. Whittemore, Milwaukee, Wisconsin.  
Auditor, James P. Whiting, Milwaukee, Wisconsin.  
Superintendent Iowa Division, Chas. H. Prior, Minneapolis, Minnesota.  
Superintendent Western Union Division, (formerly the Sabula, Ackley & Dakota and Dubuque Southwestern Railroads,) D. A. Olin, Racine, Wisconsin.

### CHICAGO & NORTHWESTERN.

President, Albert Keep, Chicago, Illinois.  
Vice-President, Secretary and Treasurer, M. L. Sykes, New York.  
General Manager and General Superintendent, M. Hughitt, Chicago, Illinois.  
Chief Engineer, E. H. Johnson, Chicago, Illinois.  
Auditor, J. B. Redfield, Chicago, Illinois.  
Superintendent of Iowa Division, J. S. Oliver, Clinton, Iowa.

### CHICAGO, ROCK ISLAND & PACIFIC.

President, Hugh Riddle, Chicago, Illinois.  
Vice-President, David Dows, New York.  
Secretary and Treasurer, Francis H. Tows, New York.  
General Superintendent, A. Kimball, Davenport, Iowa.  
Auditor, Charles F. Jilson, Chicago, Illinois.  
Superintendent of Iowa Division, H. F. Royce, Des Moines, Iowa.

### CROOKED CREEK.

President, General Manager, General Superintendent and Chief Engineer,  
W. C. Willson, Webster City, Iowa.  
Vice-President, T. H. Judd, Milwaukee, Wisconsin.  
Secretary and Treasurer, Jacob M. Funk, Webster City, Iowa.

### DAVENPORT & NORTHWESTERN.

President, Lewis H. Meyer, New York.  
Vice-President, James C. Spencer, Milwaukee, Wisconsin.  
Secretary and Auditor, J. Smith Conner, Davenport, Iowa.  
Treasurer, August Rutten, New York.  
General Manager and General Superintendent, John E. Henry, Davenport, Iowa.

### DES MOINES, ADEL & WESTERN.

President, T. J. Caldwell, Adel, Iowa.  
Vice-President, J. W. Russell, Adel, Iowa.  
Secretary, A. C. Hotchkiss, Adel, Iowa.  
Treasurer, L. Lambert, Adel, Iowa.  
General Superintendent, Thos. Ashton, Adel, Iowa.  
Chief Engineer, James Carss, Des Moines, Iowa.

### DES MOINES & FORT DODGE.

President, Charles E. Whitehead, New York.  
Secretary, Frank Saunders, New York.  
Assistant Treasurer, George W. Ogilvie, Des Moines, Iowa.  
Superintendent, Charles N. Gilmore, Des Moines, Iowa.

## LIST OF OFFICERS.

## DES MOINES &amp; MINNEAPOLIS.

President, James Callanan, Des Moines, Iowa.  
 Vice-President and General Superintendent, J. J. Smart, Des Moines, Iowa.  
 Secretary, C. B. Atkins, Des Moines, Iowa.  
 Treasurer, C. H. Getchell, Des Moines, Iowa.

DUBUQUE SOUTHWESTERN.—(*See Chicago, Milwaukee & St. Paul, Western Union Division.*)

## FORT DODGE &amp; FORT RIDGELY.

President, Walter H. Brown, Tanhousen, Minnesota.  
 Vice-President, George W. Bassett, Fort Dodge, Iowa.  
 Secretary, G. T. Peterson, Fort Dodge, Iowa.  
 Treasurer and General Superintendent, G. R. Pearsons, Fort Dodge, Iowa.  
 General Manager, W. M. Grant, Fort Dodge, Iowa.  
 Chief Engineer, E. Colburn, Fort Dodge, Iowa.

## GRINNELL &amp; MONTEZUMA.

President, M. Snyder, Grinnell, Iowa.  
 Secretary and Treasurer, H. Lawrence, Grinnell, Iowa.  
 General Superintendent, J. B. Grinnell, Grinnell, Iowa.

## ILLINOIS CENTRAL.

President, W. K. Ackerman, Chicago, Illinois.  
 Vice-President, James C. Clarke, New Orleans, Louisiana.  
 Secretary, L. A. Catlin, New York.  
 Treasurer, L. V. F. Randolph, New York.  
 Traffic Manager, J. F. Tucker, Chicago, Illinois.  
 Superintendent, E. T. Jeffery, Chicago, Illinois.  
 Auditor, J. C. Welling, Chicago, Illinois.  
 Superintendent of Iowa Division, D. W. Parker, Dubuque, Iowa.

## IOWA EASTERN.

President and General Manager, E. H. Williams, Beulah, Iowa.  
 Vice-President, Wm. B. Fairfield, Charles City, Iowa.  
 Secretary, Frank Larrabee, McGregor, Iowa.

IOWA MIDLAND.—(*See Chicago & Northwestern.*)

IOWA, MINNESOTA & NORTH PACIFIC.—NO REPORT.

## IOWA RAILWAY, COAL AND MANUFACTURING COMPANY.

President, General Manager and General Superintendent, Charles A. Sherman, Boonsboro, Iowa.  
 Vice-President and Secretary, Delos Arnold, Marshalltown, Iowa.  
 Treasurer, T. N. Canfield, Boonsboro, Iowa.

IOWA SOUTHERN & MISSOURI NORTHERN.—(*See Chicago, Rock Island & Pacific.*)

## LIST OF OFFICERS.

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### KANSAS CITY, ST. JOSEPH & COUNCIL BLUFFS.

President, Nathaniel Thayer, Boston, Massachusetts.  
Secretary and Treasurer, Charles Merriam, Boston, Massachusetts.  
General Manager, Geo. H. Nettleton, Kansas City, Missouri.  
General Superintendent, J. F. Barnard, St. Joseph, Missouri.  
Auditor, J. S. Ford, Kansas City, Missouri.

### KEOKUK & DES MOINES.

President, Henry A. Borling, New York.  
Secretary, A. Bridgman, Keokuk, Iowa.  
General Superintendent, A. Kimball, Davenport, Iowa.

### MISSOURI, IOWA & NEBRASKA.

President, F. M. Drake, Centerville, Iowa.  
Vice-President and General Superintendent, Henry Hill, Warsaw, Ills.  
Secretary and Treasurer, James Fitz Henry, Keokuk, Iowa.  
Chief Engineer, Henry Shaw, Centerville, Iowa.  
Auditor, O. H. Mackroth, Keokuk, Iowa.

SABULA, ACKLEY & DAKOTA.—(*See Chicago, Milwaukee & St. Paul—Western Union Division.*)

### ST. LOUIS, KEOKUK & NORTH-WESTERN.

President, A. B. Stone, New York.  
Vice-President and General Superintendent, A. L. Griffin, Keokuk, Iowa.  
Secretary, H. B. Blood, Keokuk, Iowa.  
Treasurer, W. H. Harris, Cleveland, Ohio.  
Auditor, C. H. Hurt, Keokuk, Iowa.

### ST. LOUIS, OTTUMWA & CEDAR RAPIDS.

President, B. W. Lewis, Jr., St. Louis, Mo.  
Vice-President and Secretary, James F. Howe, St. Louis, Mo.  
Treasurer, R. D. Kohn, St. Louis, Mo.  
General Manager and General Superintendent, T. McKissock, St. Louis, Mo.  
Chief Engineer, S. T. Emerson, St. Louis, Mo.  
Auditor, D. B. Howard, St. Louis, Mo.  
Supt. of Iowa Division, Geo. B. Parsell, Moberly, Mo.

### SIOUX CITY & PACIFIC.

President, Oliver Ames, North Easton, Massachusetts.  
Vice-President, D. C. Blair, Belvidere, New Jersey.  
Secretary and General Manager, P. E. Hall, Cedar Rapids, Iowa.  
Treasurer, David P. Kimball, Boston, Massachusetts.  
Superintendent, F. C. Hills, Missouri Valley, Iowa.  
Chief Engineer, J. E. Ainsworth, Missouri Valley, Iowa.  
Auditor, G. T. Crandall, Cedar Rapids, Iowa.

### SIOUX CITY & PEMBINA.

President and General Manager, Chas. G. Wicker, Battle Creek, Michigan.  
Vice-President, W. W. Brookings, Sioux Falls, Dakota.  
Secretary, J. B. Hauser, Yankton, Dakota.  
Treasurer and General Superintendent, G. E. Merchant, Sioux City, Iowa.  
Chief Engineer, A. K. Nash, Sioux City, Iowa.  
Auditor, C. H. Longman, Sioux City, Iowa.

## LIST OF OFFICERS.

## SIOUX CITY &amp; ST. PAUL.

President, E. F. Drake, St. Paul, Minnesota.  
Vice-President, A. H. Wilder, St. Paul, Minnesota.  
Secretary, W. H. Brown, New York.  
Treasurer, Horace Thompson, St. Paul, Minnesota.  
General Manager, J. W. Bishop, St. Paul, Minnesota.  
Chief Engineer, T. P. Gere, St. Paul, Minnesota.  
Superintendent of Iowa Division, John F. Lincoln, St. Paul, Minnesota.

STANWOOD & TIPTON.—(See *Chicago & Northwestern*.)

## TOLEDO &amp; NORTHWESTERN.

President, W. F. Johnston, Toledo, Iowa.  
Vice-President, L. Clark, Toledo, Iowa.  
Secretary, L. B. Nelson, Toledo, Iowa.  
Treasurer, H. Galley, Toledo, Iowa.  
General Superintendent, C. C. Whitten, Toledo, Iowa.

WAUKON & MISSISSIPPI.—NO REPORT.